The Oil and Gas Journal

PRODUCING REFINING ENGINEERING MARKETING

VOL. 29. NO. 13. TULSA, OKLAHOMA, AUGUST 14, 1930

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Table of Contents

SPECIAL ARTICLES

Oil Production Below Allotted Level 35
By Andrew M. Rowley
Oklahoma chiefly responsible for success achieved. Previous overproduction has piled up huge surplus.

Difficulties Over Texas Proration 37
By B. D. Stevenson
Big Lake Field and Gulf Coast operators raise objections. Test suit likely.

May Announce Prairie-Sinclair Plans September 17 37
By A. E. Mockler
Tide Water-Associated and possibly Rio Grande may be included.

Combine Stabilizer and Recovery Plant 38
By W. T. Ziegenhain
Continental debuntanizes pressure distillate to decrease plant losses.

Oil Wrought Big Change in Van, Texas 39
By L. E. Bredberg
Unit development prevented conditions in usual boom town.

Skim and Rerun in One Operation 40
By C. O. Willson
Allegheny-Arrow Oil Co.'s new plant at Canton, Ohio

Many Methods of Securing Cool Water 41
By L. G. E. Bignell
Petroleum industry has developed efficient systems.

Argentine Refineries Increase Output 42
Specially Contributed
Private plants supply constantly increasing share of demand.

The Lone State (Editorial) 44

Simplify Rerun Distillate Operation 46
By R. B. Pierce
Unit at Louisiana Oil Refining Corp. plant operated by one man.

Pipe Line Construction News 71

Snapped by the Camera in Oil Areas 90

Field Problems and Their Solution 106
Edited by Thomas F. Smiley

Central America Importing More Oil 147
By Charles E. Kern
Coal supplanted and power generated from liquid fuel.

Petroleum Resources of Japan 165
By Yoshinosuke Chitani

Bureau of Mines Report for June 170

FIELD OPERATIONS

Late Fields 48

Oklahoma 50
By W. A. Spinney

Kansas 52
By W. A. Spinney

Southwest Texas 54
By B. D. Stevenson

Gulf Coast 56
By Neil Williams

North Louisiana-Arkansas 57
By D. H. Bancroft

Rocky Mountain Area 59
By Tolbert R. Ingram

Canada 59
By Victor Lauriston

California 62
By L. P. Stockman

Michigan 64
By Paul A. Elliott

Eastern Fields 79
By Special Correspondent

Tennessee 79
By George R. Whitney

Central West 82
By George R. Whitney

Kentucky 82
By George R. Whitney

West Texas 69-178
By L. E. Bredberg

North Texas and Panhandle 70-178
By L. E. Bredberg

East Central Texas 146
By L. E. Bredberg

REFINING AND MARKETING

Little Change in Oklahoma Market 36
By W. T. Ziegenhain
Advance of natural gasoline prices encouraging factor. Lubricants decline, with bright stocks lower.

Technical Questions Answered 88
By Dr. C. K. Francis

Consumption in Chicago Area Good 134
By J. B. Waldo

Easier Undertone in Eastern Gasoline 135
By A. E. Mockler

Natural Gasoline Manufacture 137

Brief Items for Petroleum Refiners 138

Refinery and Crude Prices 140-141

Tank Wagon Quotations 142

Of Interest to Sales Departments 154

ARTICLES OF GENERAL INTEREST

The Advertisers Index 33

Personal Paragraphs About Oil Men 62

Oil Field Equipment and Supplies 94-96-100

Natural Gas Industry Developments 102

Classified Want Advertisements 132-133

Oil Securities Market 144-145

Crude Petroleum Statistics 184

BRANCH OFFICE CORRESPONDENTS

D. H. Bancroft, 538 Ricou Brewster Building, Shreveport, La.
L. E. Bredberg, 610 Petroleum Building, Fort Worth, Texas.
Paul A. Elliott, Chronicle Office, Muskegon, Mich.
Tolbert R. Ingram, 130 State Office Building, Denver, Colo.
Charles E. Kern, 602 Albee Building, Washington, D. C.
Victor Lauriston, Box 136, Chatham, Ontario, Canada.
B. E. V. Luty, Bessemer Building, Pittsburgh, Pa.
A. E. Mockler, Rooms 1919-21, No. 154 Nassau Street, New York, N. Y.
B. D. Stevenson, 1504 Milam Building, San Antonio, Texas.
L. P. Stockman, 522 Union Oil Building, Los Angeles, Calif.
F. B. Taylor, Box 994, Casper, Wyo.
John B. Waldo, Room 1416, No. 6 North Michigan Blvd., Chicago, Ill.
Leon H. Walter, Oil City Derrick, Oil City, Pa.
George A. Whitney, Box 98, Main Postoffice, Toledo, Ohio.
Neil Williams, 1316 Second National Bank Building, Houston, Texas.

Refinery Section Starts on Page 134

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Refinery Section Starts on Page 134

Oil Production Below Allotted Level

Highest daily average estimated total production in 1929, week ended Aug. 24, 2,975,435 bbls. Lowest in 1929, Dec. 27, 2,595,320 bbls.

Oklahoma Chiefly Responsible for Success Achieved. Previous Overproduction Has Piled Up Huge Surplus

Highest daily average estimated light oil production in 1929, week ended Sept. 14, 2,534,524 bbls. Lowest in 1929, Apr. 13, 2,142,036 bbls.

By Andrew M. Rowley

Crude oil production in the United States last week again dropped below the allotted daily average suggested by the Committee on Economics of the Federal Oil Conservation Board. But as has been stated before the overproduction piled up during this year is so great the net underproduction of last week is important only in that it proves the conservation movement has succeeded. Texas, as has been the case during all of this year, produced considerably more crude oil each day than its suggested allotment while Oklahoma was responsible for bringing the total output below the suggested figure, production in Oklahoma being 95,000 barrels daily less than the figure recommended for it by the committee of the Federal Oil Conservation Board. The table showing these figures is published on page 48 of this issue.

A glance at the graph on this page shows why the industry should feel optimistic as to the future, providing the conservation movement is continued 100 per cent in all areas. Production of crude oil last week was 482,000 barrels daily less than the average for the similar week last year. If the situation in Texas is finally ironed out and the State Railroad Commission there orders crude oil production be curtailed to the extent of 125,000 barrels daily and makes its order entirely effective, the petroleum industry should set aside a day for general rejoicing.

Consumption of gasoline continues at a high level causing many to wonder why prices of that product in many areas are held so low there can be no profit in manufacturing and selling it. It is generally admitted the statistical position of both the production and refining branches of the industry has improved very greatly during recent months but this improvement certainly has not been reflected in prices.

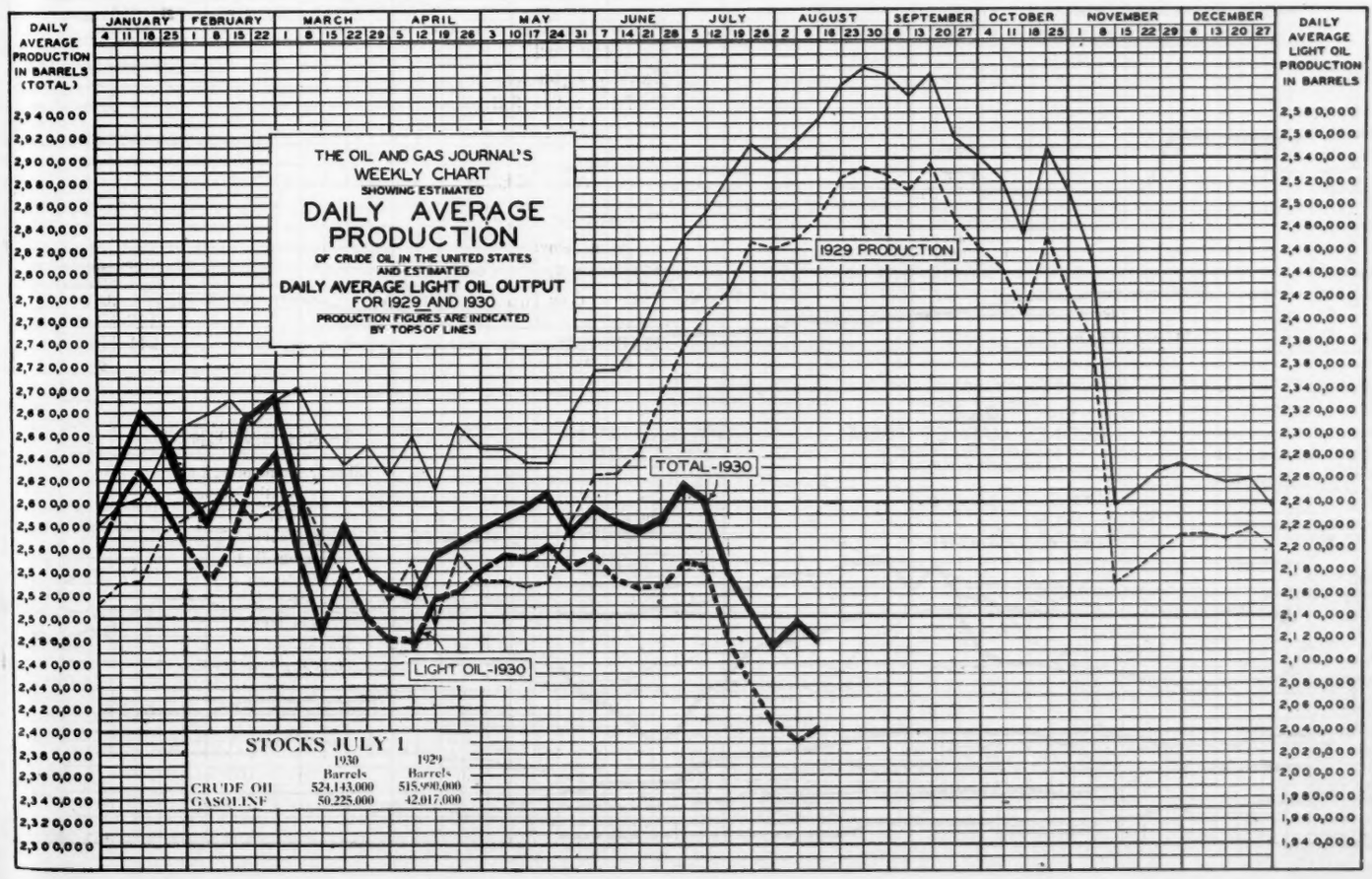
With crude oil production nearly half a million barrels a day less than it was a year ago, prices are lower than they were then. With gasoline consumption greater than it was a year ago, prices are below what they were then, in fact there has been only about one week this year when gasoline prices even equalled what they were last year. These are facts which many find it hard to understand.

PRODUCTION IN THE UNITED STATES

Estmated daily average production of light and heavy gravity oil in the United States for week ended August 9 and a comparison with the previous week follows:

	August 9		August 2	
	Light	Heavy	Light	Heavy
Oklahoma—				
Oklahoma City	96,885	.....	100,385	.....
St. Louis-Pearson	23,465	.....	24,870	.....
Seminole	136,770	.....	131,395	.....
Northern miscellaneous	240,510	.....	235,970	.....
Southern fields	62,445	.....	61,385	.....
Total Oklahoma	560,075	.....	554,005	.....
West Texas—				
Hendricks	77,315	.....	73,145	.....
Yates	107,130	.....	105,850	.....
Remainder	109,348	.....	119,625	.....
Total West Texas	293,793	.....	298,620	.....
North Louisiana	37,420	5,225	36,450	5,200
Arkansas	18,195	37,300	17,760	37,280
North Central Texas	125,005	.....	125,968	.....
Texas Panhandle	97,725	.....	96,546	.....
East Central Texas	39,901	.....	41,960	.....
Kansas	117,485	.....	116,210	.....
Total Mid-Continent area	1,289,599	42,525	1,287,519	42,480
Gulf Coast	.....	200,966	.....	204,986
Southwest Texas	.....	106,376	.....	133,701
Eastern	121,000	.....	122,000	.....
Rocky Mountain area	103,893	.....	105,577	.....
California—				
Santa Fe Springs	109,500	.....	110,000	.....
Long Beach	102,500	.....	101,250	.....
Huntington Beach	28,400	.....	28,350	.....
Elwood	49,000	.....	42,000	.....
Ventura Avenue	48,000	.....	48,000	.....
Seal Beach	20,500	.....	20,500	.....
Remainder of State	170,000	86,000	166,000	86,000
Total California	527,900	86,000	516,100	86,000
Total United States	2,042,392	435,867	2,031,196	467,167
Grand total	2,478,259		2,498,363	

→ **Total Decrease, 20,104 Bbls.; Light Oil Increase, 11,196 Bbls.** ←



Little Change in Oklahoma Market

Advance of Natural Gasoline Prices Encouraging Factor. Lubricants Decline With Bright Stocks Lower

By W. T. Ziegenhain

Undue pessimism was again present in the Oklahoma refined oil market as another week passed. Crude runs are being reduced, the gasoline demand is well up to expectations and stocks are being drawn upon in many instances but refiners lack the push to assimilate these factors into a program of price advancement. The disturbing factor continues to be the Chicago situation, where prices are quoted for delivery into practically any part of the normal Group 3 market below that quoted by Oklahoma refiners. At best, the gasoline market may be said to have held its own, with hopes of strengthening as soon as a leader is found.

Another unfavorable factor during the week was the posting of reduced lubricating oil prices, the reduction, amounting to approximately 1 cent a gallon on all grades of neutrals and bright stocks were lowered 2 to 3 cents. The balance of the market remained unchanged.

Naturals Advance

Contrasted with the inability of the refinery market to muster strength, natural gasoline manufacturers have gradually brought their market to 5½ cents on all grades with a few calling upon their competitors for supplies to fill orders in excess of production. This situation was brought about largely by the reduction in the volume of material coming out of the Oklahoma City plants. Proration of the crude output there to 8⅓ per cent of the potential has cut the natural gasoline production in half. Only approximately 125,000 gallons is now coming from the field, whereas two months ago the production was two and one-half times this amount.

May Lead to General Advance

Possible strengthening of the gasoline market over the near future was brought nearer realization as reports became insistent that one large Oklahoma refiner had sold a substantial order of gasoline to be moved for export. The transaction was intended to reduce stocks to a more comfortable margin and is the first maneuver toward bettering the refiners' position to rally a general advance. This was followed by statements that the Humble Oil & Refining Co. was buying 200 cars of natural gasoline in excess of its normal purchases in this area. Thus several favorable factors are operative to justify still another effort to be made to bring prices up to a profitable level, but that effort has not been made apparent yet.

Gasoline and Naphthas

All grades of gasoline continued to be quoted over a wide range of prices. The situation remained unchanged in this respect but tended to strengthen the belief that it will be some time before the low-priced gasoline will be removed from the market. U. S. Motor gasoline continues to be quoted at 5½ cents, basis Group 3, out of Chicago plants and with this in the picture, the general Oklahoma quotation of 6 to 6⅜ cents is admittedly out of line. Prices on the high gravity gasolines remain unchanged and their movement is normal, but most attention is now focused on the 58-60 U. S. Motor grade.

A condition is quite apparent where better than U. S. Motor gasoline is supplied on an order for this grade. It is common to ship a 420 to 425 endpoint gasoline, and sometimes as low as a 410 endpoint gasoline, on such an order. This situation simply emphasizes the eagerness of the manufacturers to secure the business.

Kerosene

The 41-43 grade of kerosene was moving very slowly at 3 cents and a few sales were made at 2⅞ cents. Quality plays such an important part in the kerosene market that a price range of more than a half cent is easily justified between the low sulphur material and the high sulphur material. This accounts for some refiners securing business at prices as high as 3½ cents, but the entire kerosene market is admittedly very weak.

Natural Gasoline

The natural gasoline market advanced until all grades were quoted at 5½ cents by the close of the week. This was the only favorable factor in the list of refined oils and is interpreted by some as the first constructive step in a slow advance of the refinery gasoline market.

Distillates and Gas Oil

Distillates are moving very slowly, as may be expected, considering this period

(Continued on Page 151)

REFINED MARKET BAROMETER

Despite the improved statistical position of the industry, there was little effort shown to boost refinery market prices during the past week. Gasoline continued to be freely offered in all territories and the movement has been favorable, but except for the improvement in Mid-Continent natural prices, the general gasoline market remains soft. The posting of lower prices on neutrals and bright stocks and the continued decline in prices throughout the Pennsylvania refining area clearly shows the keen competition existing in these commodities. Fuels and gas oil remained unchanged.

Mid-Continent—A favorable movement of refinery gasoline and higher natural prices caused refiners to look toward the future with greater optimism, but low quotations out of the Chicago territory still stood as a barrier to bring about any change in the actual market structure. Neutrals and bright stocks took another decline with the balance of the market unchanged.

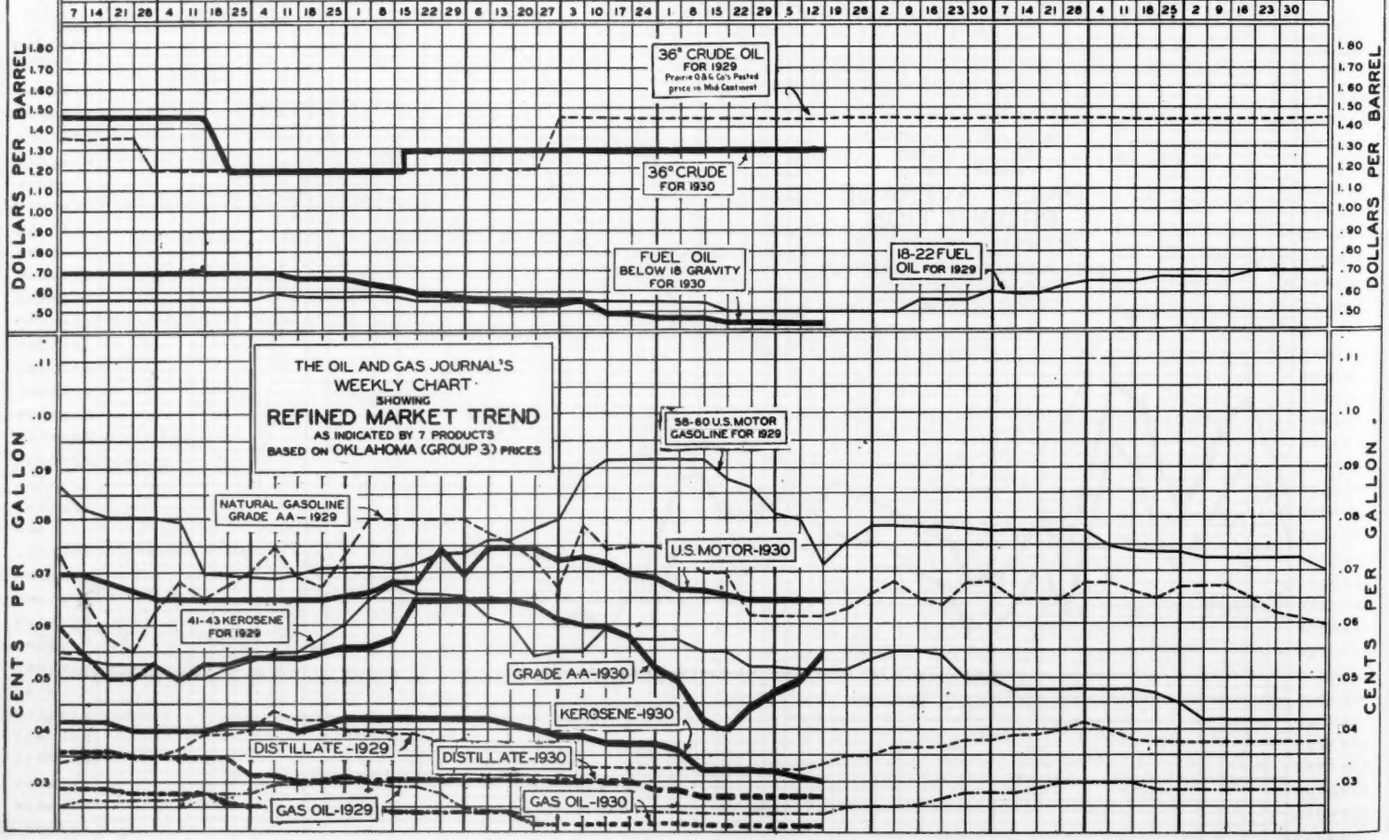
Eastern Seaboard—An easier undertone prevailed in the eastern market, but buyers remain reluctant to book ahead. Gasoline is being freely offered, but the shipments have been maintained at a favorable rate. Kerosene is weak.

California—Gasoline continues to be offered over a wide range of prices, depending upon its destination for consumption. The local situation has improved but low priced material continues to be offered for export movement.

Pennsylvania—Bright stocks and neutrals have been shaded in price during the past week, establishing new lows for the year. The balance of the market remains unchanged.

Gulf Coast—There is no change in the Gulf Coast market.

Chicago—Gasoline continues to be freely offered but the movement is good. Fear of a tank wagon cut has kept jobbers from building up their depleted stocks.



Difficulties Over Texas Proration Plan

Big Lake Field and Gulf Coast Operators Present Objections. Constitutionality of Pipe Line Law to Be Tested

By B. D. Stevenson

AUSTIN, Tex., Aug. 11.—Rules for statewide curtailment of oil production were under consideration by the State Railroad Commission Friday and Saturday with the possibility that the order would be ready this week. It will not go into effect for several days allowed for hearings on protests. A contract of six years' standing to continue during the life of the Big Lake oil field was cited to the Railroad Commission why the Big Lake Oil Co. and the University of Texas will not agree to curtailment in the Reagan County Field, owned by the university, the oil being produced by the Big Lake company.

The hearing was held by the Railroad Commission under the pipe line law in response to the recommendation of the state curtailment and equalization committee for statewide proration. As a result of the statement made by the Big Lake company and for the university the committee withdrew its recommendation of restriction in the Big Lake Field pending an investigation to be made by David Donoghue, technical advisor to the curtailment and equalization committee. Mr. Donoghue will visit the field this week.

R. R. Penn, Dallas, chairman of the committee, in withdrawing its recommendation as to Big Lake said the committee did not possess certain facts when it made the production limits there and that it fully recognizes the vested rights of contract that neither the committee nor the commission could interfere with. A further statement by Mr. Penn was that the operators in the Crane and Upton Field had about got together and that the committee's curtailment there of 33⅓ per cent would be acceptable and worked out by the local organization.

L. E. Barrows of The Texas Company was appointed chairman of the Crane-Upton County Committee. He is already chairman of the Winkler County Committee.

Special Hearings

Chairman Penn stressed the importance of all operators getting together on the state-wide proration plans, pointing out it was not the intention of the committee to work a hardship on any particular area. He suggested that the Railroad Commission adopt the general order for the State making it possible to allow special hearings on fields where there were objections. He believed that four-fifths of the districts in Texas were agreeable to proration and would accept the order. The suggestion Mr. Penn made was agreed upon.

Local self-government is to be accorded in the western regions, as in the Gulf Coast area, Chairman Penn said, because of the distinct and peculiar conditions existing there. As soon as these two regions make their reports the Railroad Commission will issue its first general proration order covering the entire State. It will be made effective far enough in the future to give all affected and opportunity to be heard in asking for revision or changes.

Cut 125,000 Bbls.

The general plan for state curtailment as outlined by Chairman Pat M. Neff would cut production to a point below demand, to make up for excess the first part of the year.

It had been recommended by an an operators' committee that production be set at 737,000 bbls. daily or about 125,000 bbls. under present production and 50,000 bbls. under market demand. The committee had recommended that West Texas be cut from 293,950 bbls. daily to 276,350 bbls., and it includes Crane, Upton, Crockett, Ector, Howard, Glasscock, Jones, Mitchell, Scurry, Reagan, Winkler, Pecos, Ward, Jones and Fisher Counties. The committee's recommendation said:

"In this district, since most of the fields are already either under proration, or are badly subject to water encroachment, we recommend that the production of Upton and Crane Counties, now totaling approximately 33,000 bbls. per day, be reduced by 33⅓ per cent, or 11,000 bbls., and that the Big Lake Field in Reagan County, now producing 11,000 bbls. from an upper or sulphur pay and 9,000 bbls. from an 8,500-foot pay, be reduced 33⅓ per cent each, or 6,000 bbls. In connection with the deep pay mentioned in this field, it should be pointed out that there is an actual waste of valuable gas far out of proportion to the oil being produced, amounting to 10,000 feet per barrel, whereas in most fields of West Texas the oil is being flowed with from 300 to 500 feet per barrel."

According to this statement, 90,000 feet of gas is being wasted every day from the deep wells of the Big Lake Field on university lands. For a month this wastage reached 2,700,000 feet.

Discussion at Hearings

The opening session of the hearing on Friday was taken up largely in submitting written briefs and reports. Independents and majors of the coastal fields joined in filing a statistical report setting forth the conditions in the coastal fields. Harrison Oil Co. and J. S. Abercrombie filed a separate statement arguing the law is unconstitutional in its provision giving the commission authority to stop economic waste and that the commission has the authority only to stop actual waste.

Chairman Pat M. Neff said if the commission has no authority to proceed such facts should be determined even if it is necessary to have the courts decide the point. A test case will no doubt be instituted to determine the powers of the commission under the new pipe line law, although oil men who want to see the curtailment succeed believe that such a case would either delay its operation to such an extent that its value would be removed, or would be postponed so long that the plan would fail. Actual waste as well as economic waste should be prevent-

(Continued on Page 149)

May Announce Merger Plans Soon

Tide-Water Associated and Possibly Rio Grande May Be Included in Prairie-Sinclair Consolidation

By A. E. Mockler

New York Bureau, The Oil and Gas Journal, Rooms 1919-21, No. 154 Nassau Street

NEW YORK, Aug. 11.—Formal announcement of the expansion plans of Sinclair Consolidated Oil Corp. will be made about September 17, coincident with the meeting of Sinclair stockholders to ratify the sale of Sinclair Pipe Line Co. and Sinclair Crude Oil Purchasing Co. holdings of the company to Standard Oil Co. of Indiana for $72,500,000 cash, it is reported here.

While nothing official has been forthcoming, it seems accepted in oil trade circles that the major features of the Sinclair expansion plan take in the acquisition of Prairie Oil & Gas Co., Prairie Pipe Line Co. and Tide Water-Associated Oil Co. Unofficial reports are to the effect that all of these deals have been tentatively closed, with final announcement hinging upon the ratification by Sinclair stockholders of the Standard of Indiana deal, which will give the Sinclair company adequate working capital for its other plans.

Partial confirmation of these statements was afforded by Harry F. Sinclair, chairman of the board of Sinclair Consolidated, who sails this week on the Majestic for a short visit to Europe. Prior to sailing, Mr. Sinclair took occasion to deny that negotiations were under way for the acquisition of either Richfield Oil Co. of California or Simms Petroleum Co., but did not comment on reports linking Tide Water-Associated with the Sinclair expansion program.

"The purpose of my trip," he said, "is to confer with our European representatives and to look into a number of situations of interest to our company. I shall return in time for a special meeting of Sinclair stockholders in September. Several matters will be acted upon at that meeting, including the contract for the sale of our half interest in the Sinclair Pipe Line Co. and the Sinclair Crude Oil Purchasing Co. to the Standard Oil Co. of Indiana.

Foreign Business Expanding

"Our foreign business has been expanding rapidly, and I anticipate a greater development of European and other foreign markets in the next few years. The market for petroleum is the world, not any one country.

"I do not look for any marked change in the domestic situation in the next few weeks. Consumption of gasoline has been improving lately, and gasoline stocks are decreasing somewhat, but the industry still faces the big problem of what it will do with surplus crude production."

Reports in the oil industry and in financial circles have credited the Sinclair organization with the ambition of creating an oil group exceeding Standard Oil Co. of New Jersey. This, if true, would necessitate the taking in of a number of other companies into the Sinclair combine. Standard Oil Co. of New Jersey as of December 31, 1929, showed total assets of more than $1,767,000,000. Aggregate assets of Sinclair Consolidated Oil Corp., Prairie Oil & Gas Co., Prairie Pipe Line Co. and Tide Water-Associated Oil Co., believed to form the nucleus of the combine which Sinclair has now arranged for, amounted to slightly more than $1,068,000,000 on the same date. The figures for the Sinclair group take in Pierce Petroleum, acquired by Sinclair since the first of the year.

Consummation of the Sinclair expansion program on the lines indicated by current reports would give the merged organization ownership of 20 refineries, with total daily capacity in excess of 320,400 bbls. of crude oil. These refineries are strategically located for economical national distribution, being at Tulsa, Blackwell, Cushing, Muskogee, Sand Springs and Drumright, Okla.; Bayonne, N. J.; Parco, Wyo.; Burkburnett and Houston, Tex.; Wellsville, N. Y.; East Chicago, Ind.; Marcus Hook, Pa.; New Orleans, La.; Kansas City and Coffeyville, Kans.; Avon, Taft and Watson, Calif., and Tampico, Mexico.

Several thousand bulk and retail stations are owned by the companies involved in principal domestic marketing areas, these properties being so located geographically that it would be a comparatively simple matter to make the distributing chain of national scope. If this is accomplished, Sinclair will be the third company to achieve such wide marketing outlets, Shell and Texas already having reached the goal of national distribution. In addition to the domestic outlets, Sinclair has a broad distribution in Mexico where Pierce Petroleum operates more than 400 bulk and retail service stations, and Sinclair products have wide distribution in Canada through a sales agreement between the Sinclair organization and Thayers, Ltd.

Important foreign distributing properties and connections are controlled by the reported Sinclair combine. The Sinclair organization has marketing companies in England and Belgium, and important connections in other foreign consuming countries, while the Tide Water-Associated company also has material foreign outlets for its well-known products. In the Orient, the Tide Water-Associated organization has obtained a strong foothold through an agreement with Mitsubishi, leading Japanese commercial organization, under which a modern refinery is being erected near Tokio by Mitsubishi and Associated, jointly, to serve Japanese and contiguous markets.

Adequate crude oil producing properties and reserves are owned by the companies reported in the Sinclair combine, both in domestic fields and in foreign producing territories as well.

A well-rounded marine transportation system is owned and operated by these companies, the combining of which will give the Sinclair organization one of the largest and most modern fleets of oceangoing tankers owned by any American oil company.

Through Prairie Pipe Line Co., reported included in the consolidation, the Sinclair group will have adequate pipe line facilities for taking care of the requirements of its constituent companies, most of which are already equipped with sufficient pipe line resources to take care of their own local requirements in their sphere of operations.

The Sinclair combine, if finally achieved with the companies mentioned, will also have important natural gas resources, and participation in a number of gas line projects already undertaken or in operation.

Consolidation plans of the Sinclair group have given rise to the report that the "new" Sinclair company, if finally welded from the units mentioned, will logically be interested in the development of an extensive gasoline pipe line system, linking up its more important refining centers with principal distributing zones. The cash deal with Standard of Indiana for the disposal of the half interest held by Sinclair in Sinclair Pipe Line Co. and Sinclair Crude Oil Purchasing Co. will give the company considerable working capital, after the necessary financing of the consolidation, and it is believed here that one of the first major projects to

(Continued on Page 76)

Combine Stabilizer and Recovery Plant

Continental Oil Co. Debutanizes Pressure Distillate to Decrease Plant Losses and Produce Blending Stock

By W. T. Ziegenhain

A combination pressure distillate stabilizing unit and gasoline recovery system was recently placed in operation at the Baltimore, Md., refinery of the Continental Oil Co. that embodies several distinctive features. The new unit is handling 4,500 bbls. of Cross and Dubbs pressure distillate daily and approximately 3,250,000 feet of wet gas. The effectiveness of the stabilizing unit is indicated by the fact the A.S.T.M. distillation loss on the stabilized P.D. is nil and a low temperature fractional analysis of the stabilized P.D. shows it to be propane free with only a trace of butane present. The effectiveness of the gasoline recovery system is shown by the fact the residue gases contain too small a gasoline content to be measured by the charcoal absorption method. A low temperature fraction shows only one-quarter to one-half gallon per 1,000 feet to be present as butane.

Running West Texas Crudes

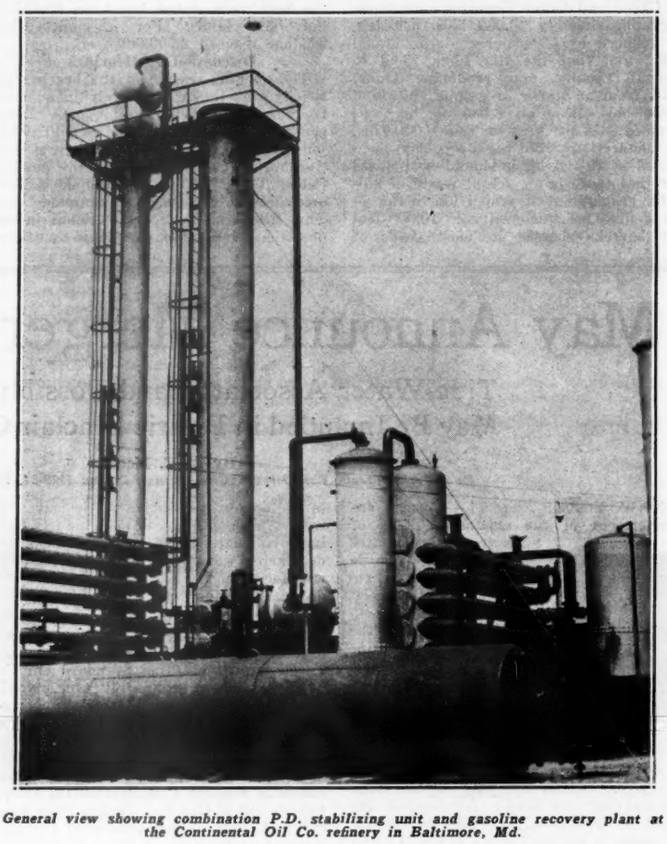
At present the refinery is operating on Pecos, West Texas, crude received in tankers. This crude is well known for its high sulphur content and the high hydrogen sulphide content of its distillates.

One of the unusual results noted in the operation of the stabilizing unit thus far is that no hydrogen sulphide remains in the P.D. This is accounted for by the effectiveness of the fractionation during which the hydrogen sulphide leaves the liquid along with the butane and lighter fractions. This factor has lessened corrosion of the rerunning equipment and has simplified the treating problem.

Operation of Stabilizer

The operation of the P.D. stabilizing unit may best be outlined by referring to the accompanying flow chart. This drawing includes both the stabilizing unit and the gasoline recovery system, but consideration now needs to be given only to the assembly in the upper left-hand corner.

The distillate from the Dubbs and Cross units, as shown, is run together into a surge tank under a pressure of 25 pounds. From here the raw distillate is pumped through a heat exchanger and then enters the fractionator near its mid-section. The distillate is further heated as it passes down through the fractionator and finally goes into the fractionator kettle where the temperature is maintained at 300° F. The kettle receives its heat from submerged, closed steam coils.



General view showing combination P.D. stabilizing unit and gasoline recovery plant at the Continental Oil Co. refinery in Baltimore, Md.

The dissolved gases, propane and practically all of the butane are distilled off of the P.D. by this time and these work their way up through the fractionator and leave at about 106° F. A wet trim made up of a condensed portion of this overhead stream serves as the control medium. At this point in the procedure it is interesting to note the method of control used in supplying the reflux material. As may be seen on the drawing, the vapor from the fractionator passes through an exchanger cooled with water. The volume of water passing through this exchanger or condenser determines the extent to which condensation takes place and enough water is automatically run through the condenser to maintain a constant level of gasoline in the scrubber, which also acts as a surge tank for the reflux.

The vapors leaving the scrubber are now ready to go through the gasoline recovery unit. They enter the rich gas scrubber at about 45 pounds pressure. The further processing of these vapors, together with the vapors from the pressure stills, etc., will be discussed later.

Stabilized Pressure Distillate

The stabilized P.D. is continuously withdrawn through a heat exchanger where it gives up a portion of its heat to the incoming unstabilized P.D. and then it is cooled to about 80° F. with water as it passes through a second exchanger. The P.D. is now ready to be stored for rerunning. The evaporation losses on storing, and the distillation losses on rerunning, are naturally very low.

An idea of the effectiveness of the stabilization and relative evaporation losses that occur in storing the stabilized and the unstabilized P.D. may be gained from the following distillation tests made

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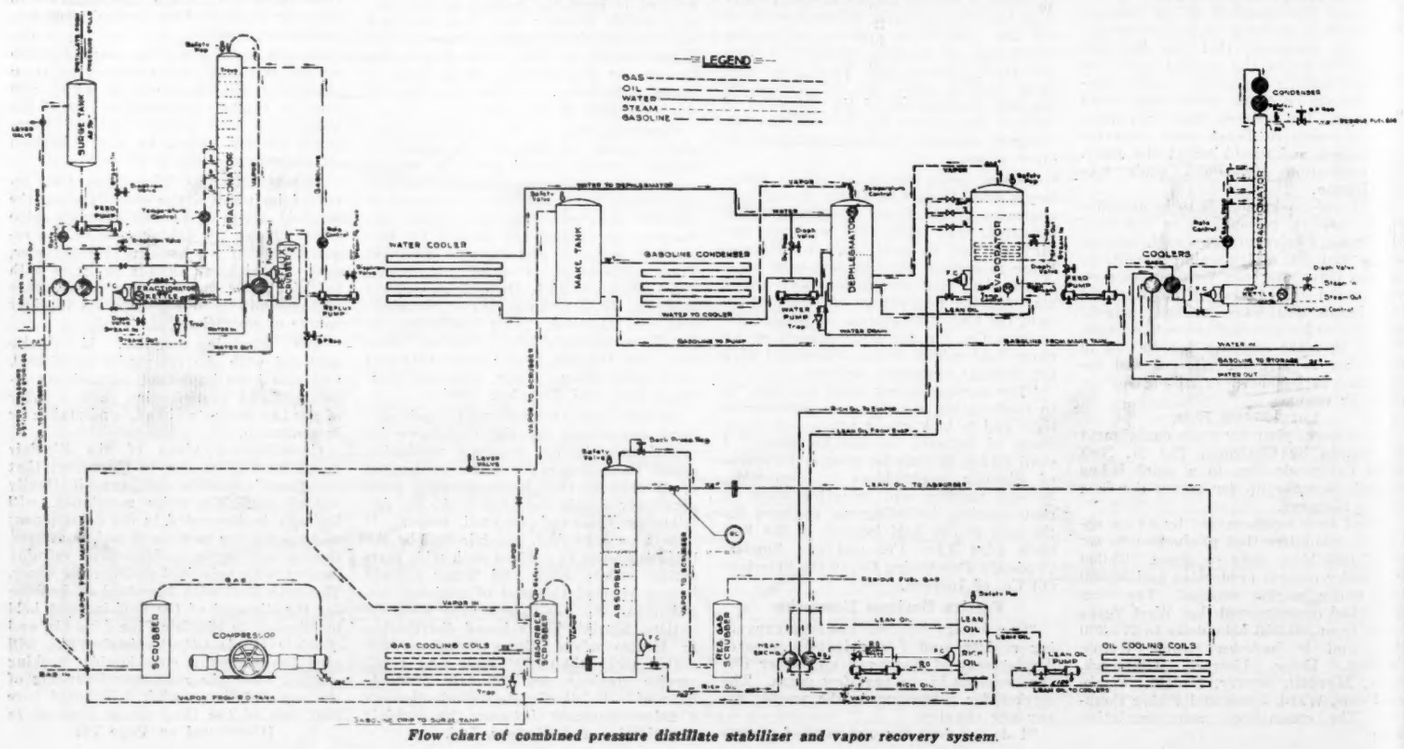

Flow chart of combined pressure distillate stabilizer and vapor recovery system.

Oil Wrought Big Change in Van, Texas

Unit Development, However, Prevented Conditions Which Usually Obtain in Boom Town. Modern Improvements Installed

By L. E. Bredberg
Fort Worth Bureau, The Oil and Gas Journal

FORT WORTH, Texas, Aug. 11.—Leave it to oil to change the aspects of an area. The town of Van, in East Central Texas, is one of the many crossroads towns which has come into its own, and has been changed throughout by the encroachment of derricks which have followed in the wake of the discovery of oil by the Pure Oil Co., October 14, 1929, on the W. T. Jarman 142-acre farm in the Nacogdoches County School Lands Survey.

One house and a general store, owned and operated by P. H. Tunnell, was the only domicile and the lone mercantile or trading establishment in the town when the Pure Oil Co. erected its derrick, about 2,200 feet to the north, in the corner of a sandy cotton patch. The men running tour ate at this house. These same men will tell you that everything has changed. Van is gradually growing larger, although it has not witnessed the wild boom days of other oil field towns, causing them no end of trouble and resulting in the Texas Rangers entering to take charge and stamp out the principal vices.

One lone Ranger, who has the monicker of "Lone Wolf" enters Van now and then to see that everything is running smoothly, and that Van is not being overrun by outlawry or trouble makers. His appearance forebodes evil to evil doers, and his entrance is not heralded by pomp and ceremony. Those who live by shady games may expect to be interrupted at any moment, and incarcerated in a neighboring town's "bastile," for Van, as yet, has erected no such permanent rendezvous for its culprits. But after 9½ months' growth, Van continues to be a quiet and orderly place, with no serious crime having yet been perpetrated.

Van Is Orderly Town

Orderliness in the town probably is due largely to the fact that one company is developing the field under a unit plan which was put in force immediately following the discovery of the pool. Under a unitized plan of production the Pure Oil Co., which drilled in the discovery well on a large block of acreage which was formerly geologized and core drilled by company men, is drilling the wells and transporting the oil; the other companies in the field paying their prorata share, according to the amount of acreage each holds, for the production and transportation. These other companies are The Texas Company, Shell Petroleum Corp., Sun Oil Co., and the Humble Oil & Refining Co.

The Humble Oil & Refining Co. recently completed a well in the southeast corner of the Mrs. E. E. Carroll 95-acre tract, in the William Daniels Survey, about 1¼ miles northeast of production in the Van Pool, extending this pool in that direction onto acreage which is not included in the original unit plan. Companies holding offset acreage in the new area have withheld from forming a second unit plan and it looks as if that acreage would be drilled up as the companies see fit, each company drilling its own wells and producing its own oil, although there is but one pipe line into the area.

The Pure Oil Co.'s 10-inch pipe line to Smiths Bluff, on the Gulf Coast, will serve the field for the time being, but later some other company may build a line into the area, two already having been vaguely rumored. As statewide proration seems about to go into effect, curtailing all fields of Texas, and if it proves successful, it will no doubt have much weight in keeping down production in this field to the present daily allowance of 25,000 bbls., and consequently preventing a new pipe line being laid for transporting the oil.

The Texas Company completed an east offset to the Humble's extensioner, August 3, the new well making an estimated 1,000 bbls. of oil the first three hours. Consequently the pool appears to be running to the northeast and has great possibilities in that direction, since both of these extension wells have been large producers, especially the latter, which is located in the southwest corner of the G. W. Carter 171-acre farm.

Production cannot run much farther north from the Humble and The Texas Company's wells for the Imperator Oil Co. defined the limits of production in that direction when it abandoned a test in the northwest corner of the Carter farm at a total depth of 3,504 feet. About a half mile separates this dry hole from the two producers on the south and many intervening acres may be proven for production when other wells are drilled in the section to test this land.

Only two dry holes have been drilled in the field to date, defining the pool on the east and also on the northwest. The first dry hole was drilled by the Humble Oil & Refining Co. on the west side of the J. A. Freeman 20-acre farm, to a total depth of 3,505 feet, defining the pool on the east. The second dry hole, whose total depth is 3,594 feet, was drilled by the Pure Oil Co. in the southeast corner of the A. Crim 48.5-acre farm, approximately 5,000 feet northwest of the discovery well on the Jarman farm, and north of the nearest producer on the R. C. Crim farm, which was but a small producer, and is now on the pump making only 30 bbls. of oil per day. These tests mark the east and northwest boundaries of the field, leaving the north, northeast and southern limits of the field undefined. However, the Imperator Oil Co.'s No. 1 G. J. Luther, to the extreme north end of the field, and about 6,000 feet north of production, is now shut down at 2,500 feet, having encountered no chalk, running low, and appearing as a possible dry hole, marking the northern limits of the field. A map of the Van Pool, showing drilling wells and producers, was printed in The Oil and Gas Journal, July 10, 1930, and reference to this map will give a definite picture of the field at the present time. Several locations have been made and several wells completed since that map was published, but none would make material difference to the picture, except The Texas Company's No. 1 Carter, mentioned above.

The discovery well on the Jarman farm has been drilled deeper from 2,710 feet, where it was first completed, to a new total depth of 2,947 feet, and increased to an estimated 2,664 bbls. flowing in 24 hours, this estimate based on a three-

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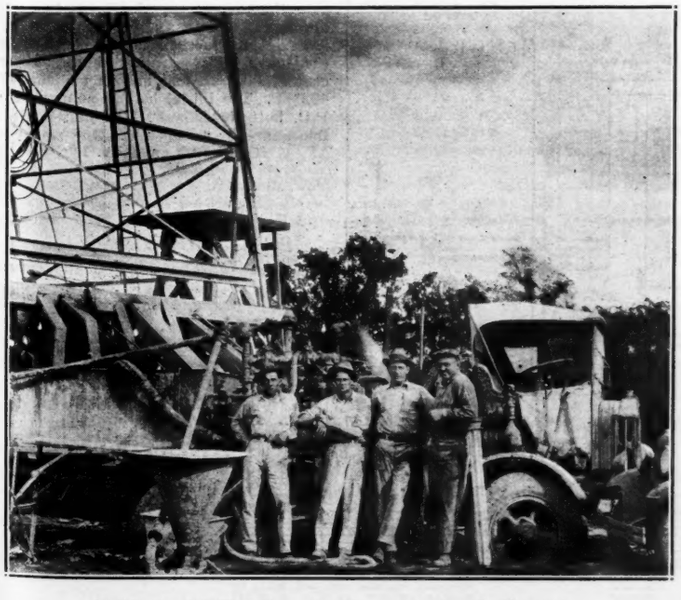
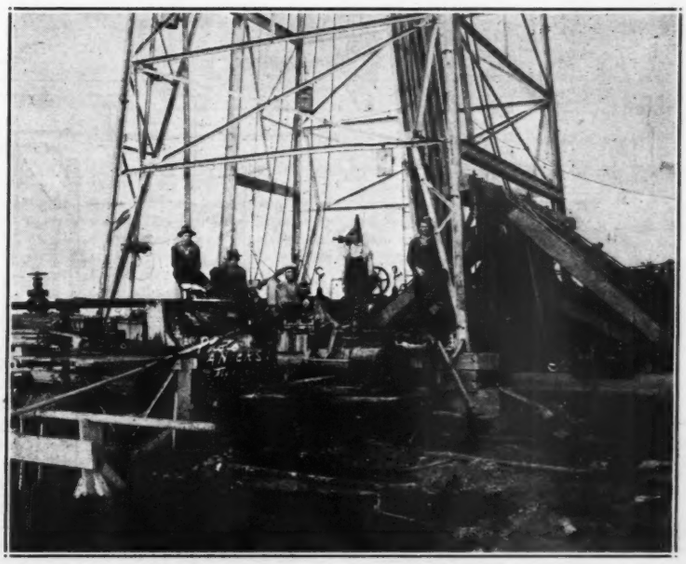


Halliburton Oil Well Cementing Co., crew and outfit, Van, Tex.



Crew that drilled in Pure Oil Co.'s No. 1 Jarman, the discovery well of the Van Pool. Reading from left to right, they are: R. W. Makin, Pete Wolf, John Floyd, driller; W. E. Spurlin and Lonnie Floyd. Carl Shost was the drilling contractor on this well.

Skim and Rerun in One Operation

Allegheny-Arrow Oil Co.'s New Plant at Canton, Ohio, Includes New Features

By C. O. Willson

The Allegheny-Arrow Oil Co. for the past 90 days has had in operation at Canton, Ohio, one of the few new refineries built during the past year.

Although its rated crude oil capacity of 1,200 bbls. daily is small when compared with those of the major refineries, the plant is sufficiently large and complete in its facilities to assure efficient operation with an investment in line with yields of finished products.

While for the most part the plant follows the conventional in design, incorporating the latest developments in construction of its designers, it does include some unusual features which have added materially to the attractiveness of the entire operation.

An understanding of the special requirements of the owners will aid in the readers' appreciation of a description of the main operating features of the plant. The Allegheny-Arrow company, which is well known in Ohio marketing circles, has a large distribution in the Canton area. Officials of the company decided to build a refinery which would furnish a supply of uniform products for this distribution, and the plant construction started last year.

The bulk of the plant products are distributed to company stations and dealers by truck from the plant, thus reducing transportation charges to a minimum. The plant capacity takes care of present marketing requirements, but the refinery is so designed that additional equipment can be added readily and the plant output increased as needed.

The crude oil for the refinery is purchased in the Mid-Continent Field. It is transported by the Texas Empire Pipe Line Co. to Stoy, Ill., where it is transferred to the lines of the Illinois Pipe Line Co., which transports it to East Sparta, Ohio. The Allegheny-Arrow Oil Co. at that point built a special line to Canton, a distance of 8½ miles and the crude is delivered to two 25,000-bbl. storage tanks at the refinery.

Arthur G. McKee & Co., engineers and builders of refinery equipment, Cleveland, Ohio, had charge of the design and construction of the entire refinery.

R. K. Schoolroy of Canton is president and the active head of the Allegheny-Arrow company's operations. William Thompson is vice president. M. S. Beringer is refinery superintendent. Mr. Beringer has had years of experience in the construction and operation of refineries in the United States and foreign countries.

Crude and Rerun Unit

A most interesting feature of the refinery is the combination skimming and rerun unit. The pipe still unit is so designed that it serves both to skim straightrun gasoline from the crude oil and at the same time through an efficient heat exchange system reruns the pressure distillate secured from the Dubbs cracking unit, in one continuous operation. This particular hookup, so far as the writer knows, is unique in refinery operation.

The crude is charged to the tube still without preheat, which enables maximum heat to be taken from fuel. The crude enters the still at bottom at convection section, passing up through the section and then through the radiant tubes. The flue gases leave the furnace at 450° F., which demonstrates the advisability of the cold charge.

In the furnace the crude is heated to 550° F. Immediately upon leaving the furnace the discharge line is increased in size to permit partial vaporization before entering the bubble tower. From the bubble tower a 410 endpoint specification gasoline is taken overhead through tubular condensers and a gas separator to rundown tanks. Gasoline from the gas separator is recirculated over top of tower and the temperature automatically controlled through use of temperature and pressure controllers. Temperature is recorded by a pyrometer.

The flow of topped crude from base of tower through exchangers A and B is automatically controlled by a liquid level controller. In the exchangers A and B the topped crude, as will be explained later, gives up its heat for the rerunning of the pressure distillate. Provision is made to introduce steam in the base of tower for stripping the topped crude. The topped crude leaves the tower with an initial boiling point of 440° F. After leaving the third exchanger, the topped crude passes through a serpentine coil in the cooler box to storage.

Pressure Distillate Rerun Unit

The treated Dubbs pressure distillate is charged through a vapor heat exchanger, where it is heated to 225° F. by the gasoline vapors from rerun tower. From this exchanger the pressure distillate charge is conducted through exchangers "B," where it is heated to 375° F. by the topped crude from crude tower. This topped crude previously has passed through exchanger A, where it gave up some of its heat to the recycle stock. From exchanger B the heated pressure distillate is conducted to the rerun tower, entering it at the top of the stripping tray section. Above the point where this heated pressure distillate enters the tower are 13 bubble trays for fractionating the gasoline. A 425-endpoint specification, high antiknock gasoline is taken from the top of this tower through a vapor heat exchanger and thence through a tubular cooler to a separator and storage. Control of the overhead stream is automatically obtained with temperature and pressure controllers which govern the quantity of gasoline recirculated from the separator over the top of the tower. The tower temperature is recorded at all times.

The pressure distillate bottoms pass downward through stripping sections and are collected on a blind tray. A level is maintained on this blind tray by means of an overflow pipe. Exhaust steam is introduced into the tower at two places: through an open coil located below liquid level on this blind tray and through an open coil located in the vapor space above the liquid on this tray and below the stripping section. Part of the P.D. bottoms collected on the blind tray are continually pumped by means of a hot oil pump through exchanger "A," where heat is picked up from topped crude as it comes from crude tower on its way to heat exchangers "B." The P.D. bottoms are returned at same height on tower as the heated pressure distillate. The recycled bottoms are heated to 375° F. in exchanger A.

The surplus pressure distillate bottoms accumulating on blind tray overflow to bottom of tower, again passing over a stripping section. Live steam may be introduced into bottom of tower through an open coil, located in the liquid at bottom of tower. The liquid level in bottom of tower is automatically controlled by a liquid level controller. The bottoms pass through a serpentine coil located in the same box with topped crude serpentine coil.

Provision is made for by-passing the heat exchangers A and B with topped crude when rerun still is not operating. Provision is also made for charging topped crude through tube still, thereby increasing throughput of pressure distillate through rerun still by virtue of the increased topped crude passing through heat exchangers A and B. As a matter of fact the rerun still can be operated without any crude oil being run by charging straight topped crude through the tube still; or the rerun still can be operated as a steam still with a sacrifice of throughput.

The steam pressure at crude and rerun unit is automatically controlled. The automatic instruments are all air operated, the air being furnished by an individual compressor at the unit. The air system is cross connected with the Dubbs air system and plant air can also be used in an emergency.

The gas from both separators is discharged through a regulating valve into the vacuum header, through which it is conducted to gas absorption plant. The tube still can be fired with fuel oil or gas—the present practice being to operate on gas from gas absorption plant.

Excellent fractionation is obtained in the tower. The gasoline shows 90 per cent at 392° F. and has an endpoint of 422° F. The initial boiling point on the P.D. butts is 435° F. The unit is flexible and easy to operate. One man per

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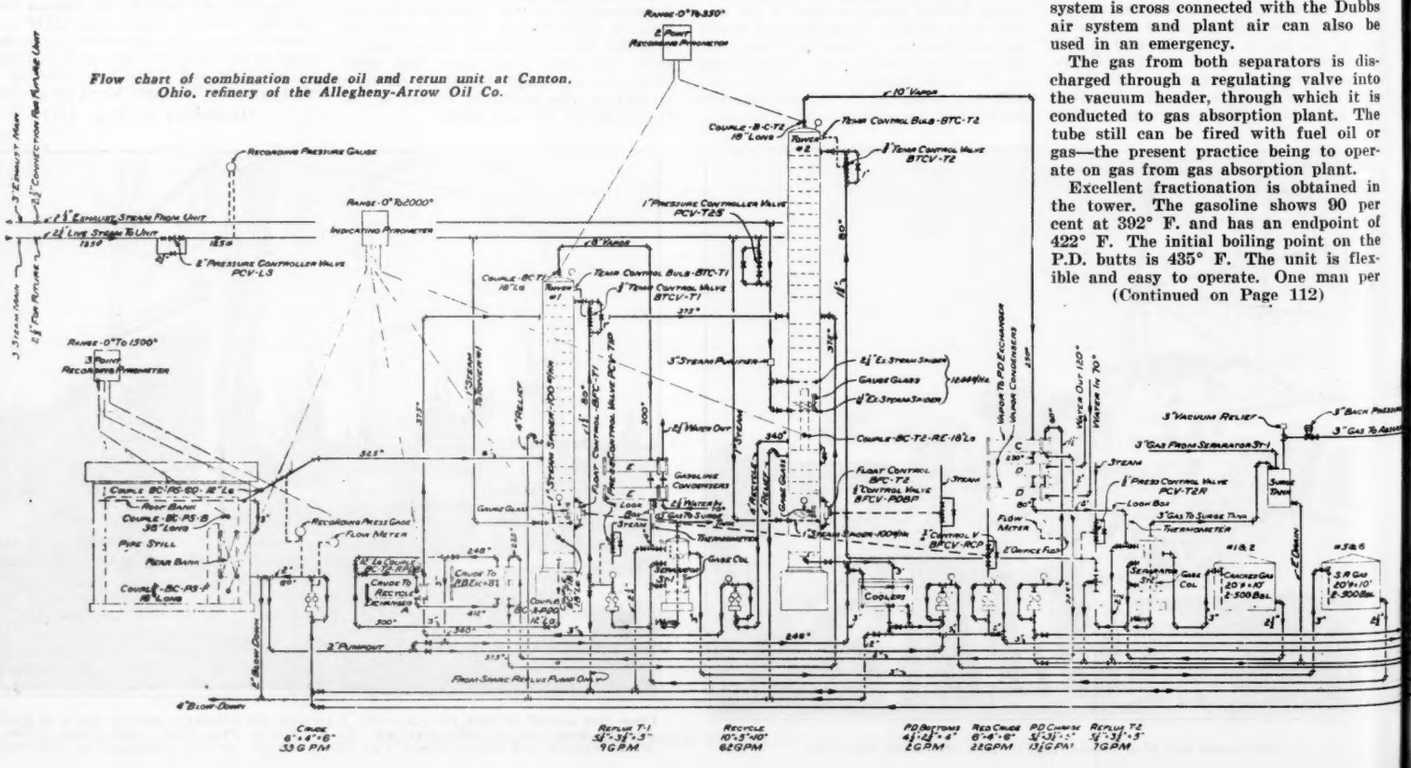

Flow chart of combination crude oil and rerun unit at Canton, Ohio, refinery of the Allegheny-Arrow Oil Co.

Many Methods of Securing Cool Water

Petroleum Industry Has Developed Efficient Systems for Getting Cool Water as Needed for Its Many Operations

By L. G. E. Bignell
Petroleum Engineering Editor

It seems to be a well established fact that water and oil will not mix, but without a good supply of water, and preferably cool water, the petroleum industry would not be able to carry on many of its activities. From the time that the exploration work to find possible oil structures begins until the finished products are placed on the market, water plays an important part in the oil man's program. To drill wells either with cable or rotary tools, or bore prospect holes with diamond drills, water is used to make steam and assist in the drilling operations. When the wells are completed water is again necessary for steam for pumps, and the gas that accompanies the oil goes to gasoline plants where large quantities of cooling water are required. In the refineries huge quantities of water are used and here again the cooler the water the better the operation.

Cool water is not so essential around the drilling wells but with rotary drilling an appreciable quantity is needed and the better the quality and the purer it is the more satisfactory it is for boiler feed purposes. In drilling wells in the Oklahoma City Pool it is estimated that approximately 140,000 bbls. of water was needed for each well.

Water for these various purposes is secured from streams, ponds, lakes and wells, and the wells are of the drilled and dug type and vary in accordance with the type of formation at the surface in which the water is found and the methods used in developing it.

Underground water has been found in areas that from their surface appearance would be judged to be without moisture for great distances in any direction. This is particularly true of the Permian Basin area of West Texas and New Mexico where the surface streams are very small during the greater part of the year and the land is quite arid and apparently free of all water in appreciable quantities.

In this area it has been found that large streams of water flow underground and can be reached economically by drilled holes or dug pits and the water pumped to the surface at relatively low costs.

In the December 19, 1929, issue of The Oil and Gas Journal there appeared an article entitled "New Technique in Developing Water" describing a system developed by E. M. Carter, mining and hydraulic engineer that has given rather remarkable results in developing large water supplies in arid country where drilled wells were costly and did not supply the quantity of water necessary for drilling and gasoline plant and refinery operations.

Cool Water Essential

Many manufacturing operations in the petroleum industry as well as in many other industries require large quantities of cooling water to remove heat from mechanical equipment that is water jacketed and from liquids used in the process that have absorbed heat in one operation and must be cooled before they can be used again.

This water is usually cooled by exposing it to the air and is used repeatedly with only such addition as is made necessary to replace that lost by evaporation or carried away by the wind.

Several methods used to cool this water are:

1. Open ponds.
2. Spray ponds.
3. Chimney towers.
4. Fan towers.
5. Open atmospheric towers.

Open Ponds

Perhaps the simplest method of cooling water is to expose it to the atmosphere in an open pond. The ponds may be simply dug earthen pits, pits lined with concrete or metal or wood tanks and the seepage losses vary with the type of pit construction used.

The warmer water will rise to the surface of the pond by convexion currents and the efficiency of this system is therefore low for heat transfer will be made largely at the surface of the water where air moving over it will take up part of the heat in the pond water. This will cause a film or layer of water at the surface to be cooled to nearly the wet bulb temperature of the air but the greater mass of water below this upper layer will be relatively warm.

Heat transfer to the air is also low because of the relative low velocity of the air currents at the earth's surface and the evaporation vapors are therefore not quickly carried away from the surface of the pond.

At small installations such as lease pumping outfits using a 250 or 500-bbl. tank for cooling water for the engine much thought has been given to increasing the movement of the water within the tank to get greater cooling effect and some very ingenious devices have been worked out for this purpose.

Spray Ponds

Because of the low efficiency of the open pond the use of spray nozzles to break up the heated water as it returns to the pond has been devised and this materially adds to the efficiency of pond cooling and is used in many industries.

Water sprayed into the air will be cooled due to the evaporation of some of the water. For spraying it is usual practice to use a 2-inch spray nozzle with about a three-quarter-inch outlet and pump the water at low pressure through several of them so as not to elevate the water too high and keep losses from wind at a minimum. The pressure is usually below 15 pounds per square inch at the nozzle. Standard spacing for the nozzles is about 8 to 10 feet.

From Power Plants and Refrigeration the following tests conducted by Schuette-Koerting nozzles is quoted:

"1. The temperature of the water after spraying is more dependent upon the temperature and humidity of the atmosphere and upon the fineness of the spray than upon the initial temperature of the water.

"2. At high humidity, 80 to 90 per cent, the temperature of the water may be lowered to within 12 to 13° F. of the temperature of the air.

"3. At low humidity, 20 to 30 per cent, the temperature of the water after spraying may be as much as 8° F. below the temperature of the air.

"4. The loss of water by evaporation is approximately 0.15 pound. per degree lowering of temperature per 100 pounds of water discharged."

The capacity of 2-inch nozzles in gallons per minute under various pressures is as follows:

Pressure	Capacity in gallons per minute
5	54
6	60
7	65.5
8	70.5
9	75
10	78

In Lichty's book "Natural Gas" is given an example showing how to determine the size of pond, number of spray nozzles, amount of water to be circulated for a plant capacity of 5,000,000 cubic feet of gas per day. The gas is assumed to have a gasoline content of 5 gallons per 1,000 cubic feet with the specific heat of the liquid gasoline of 0.65 gravity is about 0.55. The specific heat of the natural gas is about 0.50. Gravity of gas 0.97.

"Assuming a drop in temperature of 10° F. each pound of water absorbes 10 B.t.u. From this gas it is necessary to remove 5,257 B.t.u. per 1,000 cubic feet. Therefore the total heat to be removed per day is 26,285,000 B.t.u.

$$\frac{26,285,000}{10} = 2,628,500 \text{ pounds of water to be circulated per day.}$$

$$\frac{2,628,500}{60x24x8.33} = 219 \text{ gallons per minute.}$$

"From the above table it is found that four 2-inch nozzles operating at a pressure of 6 pounds will discharge the required amount of water.

"Spacing the nozzles 10 feet apart and 15 feet from the edge of the pond makes the dimensions of the pond 40'x40'.

"The make-up water required per day due to evaporation is found as follows:

$$\frac{2,628,500x0.15x10}{100x8.33} = 4,732 \text{ gallons per day.}$$

"More water than this will be required per day due to loss by wind."

Chimney Type Natural Draft Towers

The basic principle involved in this type of tower, which consists of a chimney or flue-like structure usually built of wood open at top and bottom so that a vertical column of air can pass through it, is the movement of the air within the tower caused by its being heated by the descending column of water.

The water is warm when it is pumped

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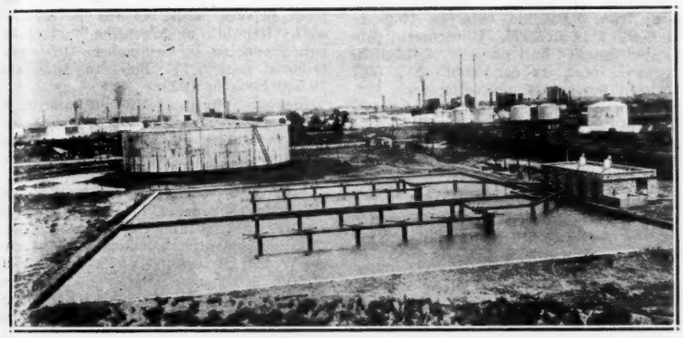
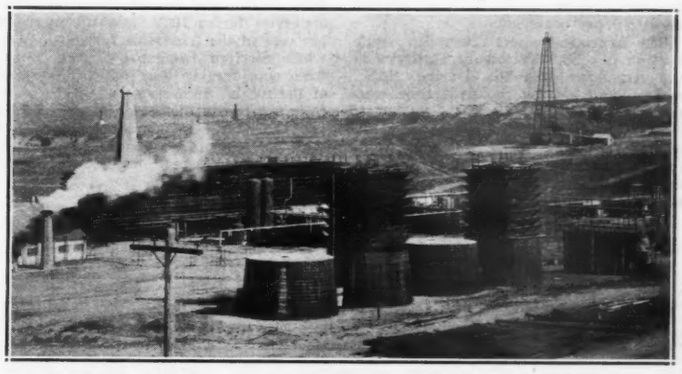
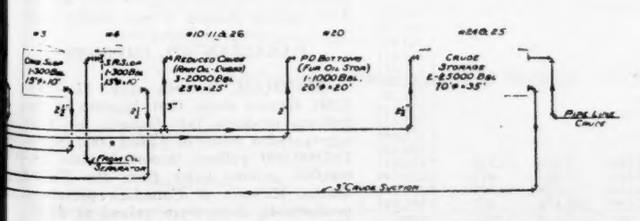


Duplex type spray pond as installed in a Mid-Continent refinery.



Water cooling system installed at gasoline plant in Texas Panhandle district.



Argentine Refineries Increase Output

Figures Reveal That Privately Owned Plants Are Now Supplying Constantly Increasing Proportion of Demand

(Specially Contributed)

In the midst of prolonged discussions of nationalization of the Argentine petroleum industry and the expropriation of private oil properties, the privately owned refineries operating in the republic continued to increase their output of gasoline and to supply a constantly increasing proportion of the Argentine gasoline trade. Statistics of the Argentine petroleum industry, recently published by the Argentine Bureau of Mines, Geology and Hydrology, show that the private refineries produced 2,402,786 bbls. of gasoline during 1929, an increase of 1,171,135 bbls., or 95 per cent, over the 1,231,651 bbls. produced during 1928. For the first time in the history of the republic, local gasoline production exceeded the quantity imported.

In the face of the increased local production, gasoline imports registered a decline of 8.5 per cent, dropping from 2,508,383 bbls. in 1928 to 2,290,667 bbls. in 1929. The combination of gasoline imported with that produced within the country by privately owned plants accounted for approximately 85 per cent of the gasoline available for distribution within the republic. Statistical data were not available on the 1929 operation of the government refineries at the time the official Argentine report was prepared. These plants, however, are restricted to running solely on locally produced crudes, which increased but 3 per cent in production during 1929 over the preceding year. With an allowance for the increased recovery of gasoline undoubtedly resulting from the new installations of cracking equipment, it is probable that the gasoline output of government plans did not exceed 800,000 bbls. It is indicated, therefore, that the government operations supplied approximately the same proportion of the Argentine gasoline demand as in 1928, or slightly under 15 per cent.

The Argentine report referred to, Publication No. 80, "Petroleum Statistics of the Argentine Republic During 1929," makes available for the first time comparable statistical data on the output of both the privately-owned and government-owned refineries. The following table relating to gasoline has been prepared from data obtained in the report mentioned:

ARGENTINE GASOLINE PRODUCTION AND IMPORTS, 1922-1929

(Figures in barrels of 42 gallons each)

Year	Production — Govt. plants — Bbls.	Govt. plants — per cent	Private plants — Bbls.	Private plants — Per cent	Imports — Bbls.	Imports — Per cent	Total Bbls.
1922	7,472	.65	140,412	12.27	996,657	87 08	1,144,541
1923	14,826	1.10	216,703	16.10	1,114,519	82 80	1,346,048
1924	29,494	1.63	282,635	15 72	1,491,780	82 65	1,804,909
1925	27,355	1.09	298,398	11.87	2,187,190	87.04	2,512,943
1926	287,396	8.76	358,473	10 93	2,633,827	80.31	3,279,706
1927	462,705	13 13	743,031	21.09	2,317,695	65 78	3,523,431
1928	632,258	14.46	1,231,651	28.17	2,508,383	57 37	4,372,292
1929	*800,000	14.57	2,402,786	43.74	2,290,667	41.70	5,493,453

*Estimated.

The sharp increase noted in government production during 1926 represents the initial production of the La Plata refinery, the principal official source of refined products, while the succeeding annual increases have resulted from enlarged refinery capacity and the addition of cracking units.

Local production of kerosene supplied approximately 60 per cent of the local demand during 1929, the output of refineries having overtaken imports during 1927 and increased the margin during each succeeding year. The following table shows the refinery output and imports of kerosene during the past eight years:

ARGENTINE KEROSENE PRODUCTION AND IMPORTS, 1922-1929

(Figures in barrels of 42 gallons each)

Year	Production — Govt.	Production — Private	Imports	Total
1922	3,831	99,369	358,826	462,026
1923	8,328	138,304	388,955	535,587
1924	18,279	171,874	424,927	615,080
1925	29,783	154,690	525,001	709,474
1926	154,004	241,152	518,717	913,873
1927	225,937	340,377	561,703	1,128,017
1928	266,797	285,220	383,558	935,575
1929	*283,000	368,305	420,373	1,071,678

*Estimated.

The increased production of fuel oil at Argentine refineries resulted in a dropping off in fuel oil imports during 1929, when receipts reached a total of 4,477,000 bbls., as compared with 5,381,000 bbls. in 1928. Fuel oil shipments from United States to Argentina have dropped sharply during the past three years: 4,307,750 bbls. in 1927, 2,113,870 bbls. in 1928 and 505,585 bbls. in 1929. No fuel oil was received in Argentina from the United States during the last six months of 1929. In 1928, receipts from the United States were slightly greater than the combined receipts from Venezuela and the Dutch West Indies, but receipts from the latter countries during 1929 made up nearly 90 per cent of the Argentine fuel oil imports while receipts from the United States were considerably less than 10 per cent of the total. As a result of increased refining capacity, both in the Argentine and the Caribbean countries, it appears that the Argentine fuel oil market may, under present conditions, no longer be served by shipments from the United States. Virtually all the gas oil consumed in Argentina is produced by the private refineries. No imports have been reported for several years.

The output of Argentine refineries and the imports of fuel oil during the past eight years are shown in the following table:

ARGENTINE FUEL OIL PRODUCTION AND IMPORTS, 1922-1929

(Figures in barrels of 42 gallons each)

Year—	Production — Govt.	Production — Private	Imports	Total
1922	125,243	1,102,544	4,237,024	5,464,811
1923	282,928	1,223,952	4,672,668	6,179,548
1924	480,934	1,334,340	4,646,262	6,461,536
1925	490,872	1,147,413	1,872,849	3,511,134
1926	3,530,685	1,945,932	2,442,974	7,919,591
1927	4,200,239	2,341,944	4,366,042	10,908,225
1928	4,604,161	2,434,523	5,380,962	12,419,646
1929	*4,300,000	3,667,552	4,476,697	12,444,249

*Estimated.

Production of crude petroleum in the Argentine during 1929 reached a total of 9,391,385 bbls., an increased of 320,790 bbls., or 3.5 per cent, over the 9,070,595 bbls. produced in 1928. Government production increased from 5,413,200 bbls. in 1928 to 5,485,952 bbls., or 72,752 bbls., while the production of privately-owned companies registered a slightly larger gain, from 3,657,395 bbls. in 1928 to 3,905,433 bbls. in 1929. Government production equalled 58.4 per cent of the 1929 national total, as compared with 59.7 per cent during the preceding year. Private companies accounted for 248,038 bbls. of the year's increase, with the government operations responsible for the remaining 72,752 bbls.

The region of Comodoro Rivadavia, the coastal field south of Buenos Aires, continued to furnish the bulk of the crude, but the record of annual increase was broken for the third time since the field was discovered in 1907 and for the first time since 1919. Production in this area dropped from 8,196,418 bbls. in 1928 to 8,161,325 bbls. in 1929, a decrease of 35,093 bbls., and the proportion of the crude obtained from this area to the national total dropped from 90.4 per cent in 1928 to 86.9 per cent in 1929. An annual production of slightly more than 8,000,000 bbls. has been attained in Comodoro Rivadavia during each of the past three years, but this level has been maintained only by increasing the number of producing wells, as the daily average production per well has been decreasing steadily for a number of years. Producing oil wells were increased from 732 at the end of 1927 to 938 at the end of 1928 and to 1,214 at the end of 1929. At the close of 1929, 66 wells were being drilled and 29 additional derricks were being erected. The decline in daily average production applies both to government wells and those operated by private companies, as shown in the following table:

DAILY AVERAGE PRODUCTION—COMODORO RIVADAVIA

Year	Average number of producing wells — Govt. owned	Average number of producing wells — Privately owned	Average daily production per well — Govt. (bbls.)	Average daily production per well — Private (bbls.)
1925	189	80	47.55	69.28
1926	279	140	45.15	61.53
1927	409	213	33.87	40.50
1928	540	303	26.25	28.27
1929	709	368	19.39	23.30

The decrease in production at Comodoro Rivadavia was offset, however, by increases at Plaza Huincul, in western Argentina, and in the province of Salta, in northern Argentina. The increase of 261,381 bbls. at Plaza Huincul, from 761,844 bbls. in 1928 to 1,023,225 bbls. in 1929, was the largest item in the national increase of 320,970 bbls. and this field contributed 10.9 per cent of the national total in 1929, as compared with 8.4 per cent in 1928. Production in Salta increased from 97,866 bbls. in 1928 to 206,676 bbls. in 1929, while the production on the hacienda "El Sosneade," in western Argentina, decreased from 14,467 bbls. in 1928 to 157 bbls. in 1929. The bulk of the Salta production came from private wells, as the government well, "Republic of Argentina," which began producing in September, 1928, contributed only 7,177 bbls. in 1928 and 19,530 bbls. in 1929.

Statistics on the field consumption of natural gas show that 1,693,995,994 feet were consumed at Plaza Huincul and 7,487,891,258 feet at Comodoro Rivadavia.

Special attention has been given in Comodoro Rivadavia to the recovery of natural gasoline and the annual production, consequently, has increased consistently. At the close of 1928, 87 per cent of the government wells in Comodoro Rivadavia were connected with gasoline plants. The annual output has been as follows:

ARGENTINE NATURAL GASOLINE PRODUCTION

(Figures in barrels of 42 gallons each)

Year	Comodoro Rivadavia — Govt.	Comodoro Rivadavia — Private	Plaza Huincul — Private	Total
1922	4,466	.....	.....	4,466
1923	4,799	.....	.....	4,799
1924	2,897	.....	.....	2,897
1925	5,330	.....	.....	5,330
1926	8,189	2,313	.....	10,502
1927	11,387	9,586	.....	20,973
1928	68,387	12,146	1,839	82,372
1929	118,395	*14,467	9,448	142,310

*Estimated.

FIND DEEPER PAY SAND

Well T-51 in the Las Cruces Field of the Colon Oil Corp. has been drilled as an exploration well with a view of determining the possibility of the existence of lower producing sands. Production from other wells in this field has thus far been obtained from depths of around 2,000 feet. T-51 has now been completed and brought into production at a depth of 4,252 feet, with an initial production of 1,728 bbls. per day through a seven-eighth-inch flow plug, and with a casing pressure of 170 pounds, thus indicating a new and deeper producing horizon in this field. Production of the field for the week ending August 1 was 90,238 bbls.

CANADIAN OIL IMPORTS

CHATHAM, Ontario, Aug. 11.—Official figures show that imports of petroleum products into Canada for June aggregated a value of $7,381,000. Out of 136,000,000 gallons imported some 94,000,000 gallons came from the United States. Exports of Canadian petroleum products in June were valued at $305,671, compared with $386,140 in May.

CRUDE OIL PRODUCTION IN ARGENTINA, 1907-1929

(Figures in barrels of 42 gallons each)

Year—	Comodoro Rivadavia — Govt.	Comodoro Rivadavia — Private	Comodoro Rivadavia — Total	Plaza Huincul — Govt.	Plaza Huincul — Private	Plaza Huincul — Total	Salta — Govt.	Salta — Private	Salta — Total	Misc. private	Total Argentina
1907	101	.....	101	.....	.....	.....	.....	.....	.....	.....	101
1908	11,454	.....	11,454	.....	.....	.....	.....	.....	.....	.....	11,454
1909	18,802	.....	18,802	.....	.....	.....	.....	.....	.....	.....	18,802
1910	20,714	.....	20,714	.....	.....	.....	.....	.....	.....	.....	20,714
1911	13,099	.....	13,099	.....	.....	.....	.....	.....	.....	.....	13,099
1912	46,933	.....	46,933	.....	.....	.....	.....	.....	.....	.....	46,933
1913	130,409	.....	130,409	.....	.....	.....	.....	.....	.....	.....	130,409
1914	275,468	.....	275,468	.....	.....	.....	.....	.....	.....	.....	275,468
1915	513,139	.....	513,139	.....	.....	.....	.....	.....	.....	.....	513,139
1916	816,319	48,880	865,199	.....	.....	.....	.....	.....	.....	.....	865,199
1917	1,142,919	67,095	1,210,014	.....	.....	.....	.....	.....	.....	.....	1,210,014
1918	1,242,739	108,695	1,351,434	80	.....	80	.....	.....	.....	.....	1,351,514
1919	1,183,104	145,850	1,328,954	123	.....	123	.....	.....	.....	.....	1,329,077
1920	1,424,965	222,280	1,647,245	3,846	.....	3,846	.....	.....	.....	.....	1,651,091
1921	1,747,408	303,051	2,050,457	5,778	.....	5,778	.....	.....	.....	.....	2,056,235
1922	2,163,196	670,574	2,833,770	31,309	.....	31,309	.....	.....	.....	.....	2,865,079
1923	2,516,303	772,229	3,288,532	44,895	1,588	46,483	.....	.....	.....	.....	3,335,015
1924	3,424,071	1,146,107	4,570,178	60,092	28,712	88,804	.....	.....	.....	.....	4,658,982
1925	3,832,323	2,037,156	5,869,479	92,866	26,148	119,014	.....	.....	.....	.....	5,988,493
1926	4,530,326	3,096,224	7,626,550	147,792	61,800	209,592	.....	1,396	1,396	1,975	7,839,513
1927	4,983,968	3,111,029	8,094,997	191,913	324,256	516,169	.....	17,989	17,989	491	8,629,646
1928	5,107,048	3,089,370	8,196,418	298,975	462,869	761,844	7,177	90,689	97,866	14,467	9,070,595
1929	5,077,369	3,083,956	8,161,325	389,053	634,174	1,023,227	19,530	187,146	206,676	157	9,391,385
Total	40,222,175	17,902,496	58,124,671	1,266,722	1,539,547	2,806,269	26,707	297,220	323,927	17,090	61,271,957

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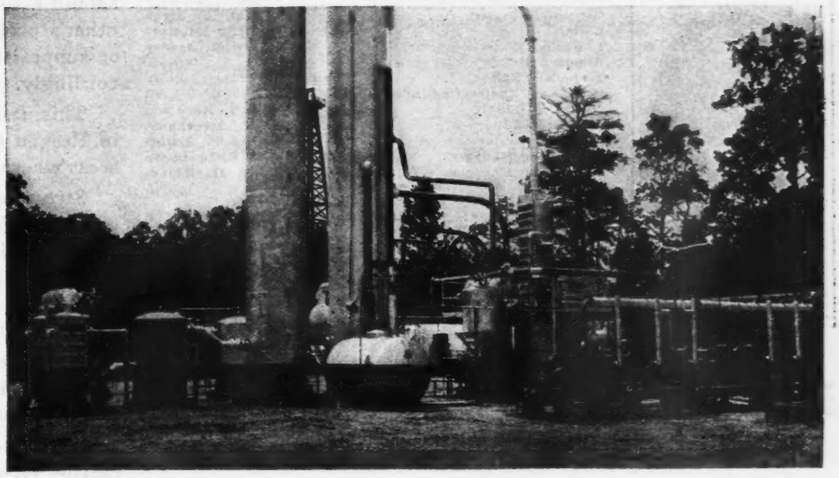

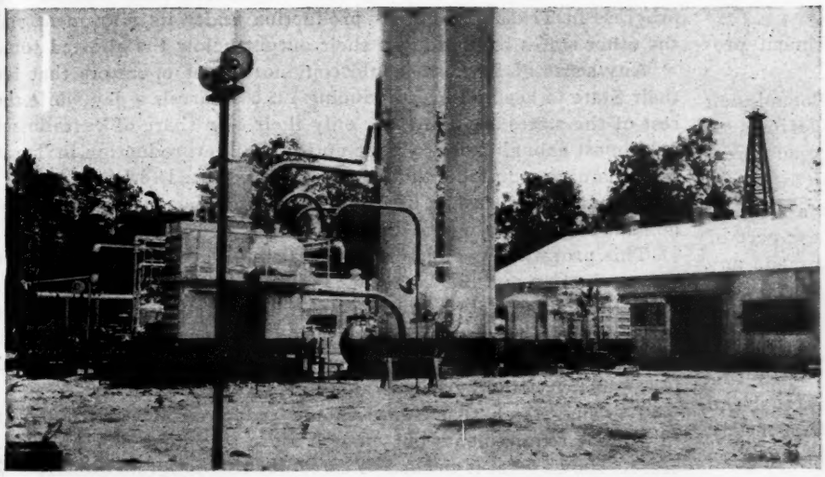

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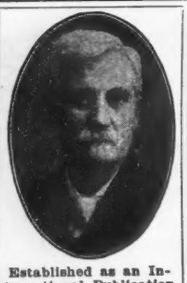

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Simplify Rerun Distillate Operation

Unit at Louisiana Oil Refining Corp. Plant With Capacity of 7,000 Bbls. Daily Operated by One Man

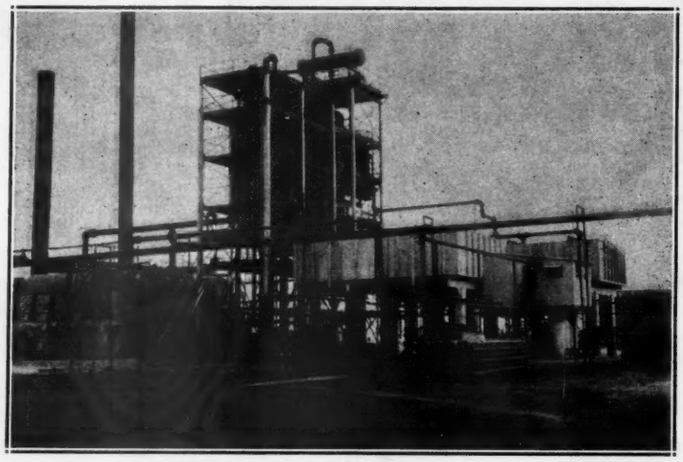
By R. B. Pierce
Manager Refining Department, Louisiana Oil Refining Corp.

Rerunning pressure distillate is one of the many operations required of each refiner manufacturing cracked distillate from sulphur-bearing crudes. The chief purpose of this operation is to remove sulphur, inhibit gum-forming tendencies and provide a material of satisfactory odor and color characteristics, and also allows the refiner to vary the specifications on the finished gasoline to meet the many demands of the present-day market.

This operation is accomplished with one of several different types of equipment, mainly, shell stills, either batch or continuous, pipe stills, heat exchangers, and in a few cases, the old style steam still is still being used. This company is now using the first type of equipment with a continuous operation.

The rerun battery consists of three 10'x30'type shell stills with internal return flues. The rerun tube stills are very similar to the horizontal return tubular boiler. The additional heating surface obtained in the tubes increases the capacity and efficiency of the battery materially.

The stills are fired from the front end with natural gas as the fuel. The still temperature is automatically controlled by varying the quantity of gas to the burners. About 115 cubic feet of gas per barrel of charge is required.



View showing towers and condenser boxes.

Each still is equipped with a large bubble tower and partial condensers. The pressure distillate is charged through these condensers counter-current to the vapors (see flow sheets for details), then through a bottom exchanger to the first tower at a temperature of approximately 240° F. The overhead temperature is controlled by a gasoline spray in the top of the bubble tower.

A large percentage of the gasoline is taken overhead in the first still. The bottoms from the first still are discharged into the second tower, where another cut of gasoline is taken overhead. This same operation is continued through the third still, where the final gasoline cut is taken overhead. The gas oil bottoms, which represent approximately 10 per cent of the charge, are pumped through the bottom exchanger to storage.

Steam is sprayed in the bottom of each

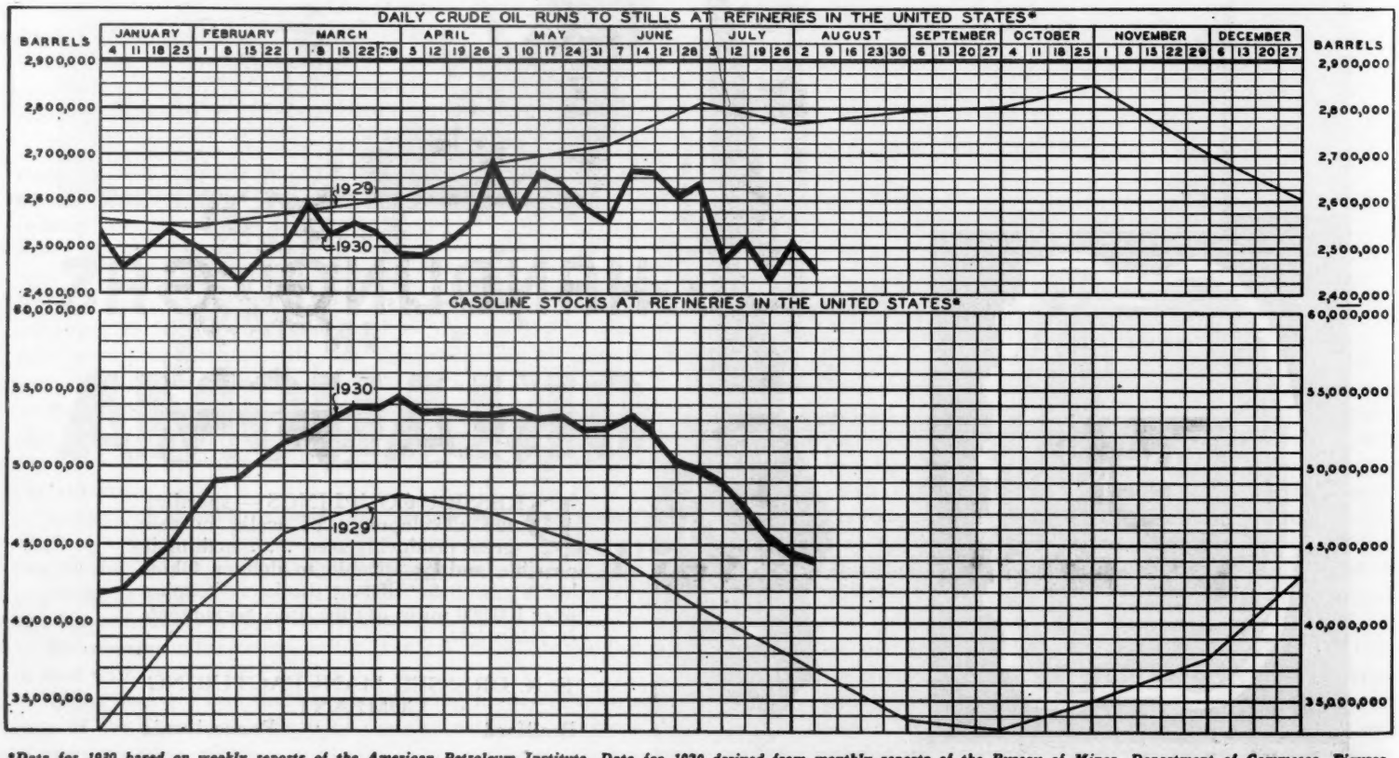
(Continued on Page 148)

AMERICAN PETROLEUM INSTITUTE WEEKLY REFINERY STATISTICS

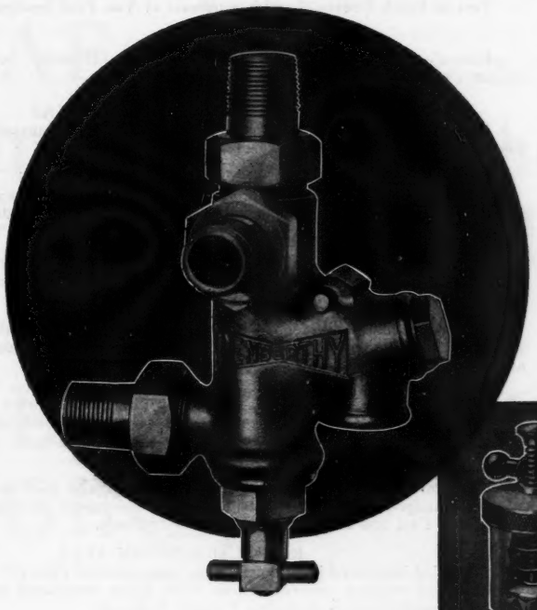
The weekly report made to the American Petroleum Institute on refinery statistics—crude runs to stills, gasoline stocks and gas and fuel oil stocks in barrels—for the week ending August 9.

	Week ending August 9				Week ending August 2				Week ending January 4			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
East Coast	100.0	483,400	6,549,000	10,147,000	100.0	488,100	7,242,000	10,084,000	100.0	454,857	5,998,000	7,431,000
Appalachian	91.8	83,600	1,451,000	1,046,000	91.8	81,000	1,494,000	1,010,000	91.6	75,571	1,282,000	805,000
Indiana, Illinois, Kentucky	99.6	296,200	6,777,000	4,396,000	99.6	285,400	7,069,000	4,387,000	98.6	289,800	5,483,000	3,505,000
Oklahoma, Kansas, Missouri	89.9	270,400	3,485,000	4,786,000	89.9	261,600	3,671,000	4,730,000	87.7	263,428	3,604,000	3,277,000
Texas	90.4	550,000	6,595,000	10,192,000	90.4	561,600	6,737,000	10,141,000	90.7	539,857	6,590,000	13,757,000
Louisiana and Arkansas	96.8	161,000	1,501,000	1,779,000	96.8	157,900	1,741,000	1,938,000	96.8	160,000	2,161,000	4,499,000
Rocky Mountain	93.6	54,900	2,301,000	1,218,000	93.6	52,100	2,400,000	1,204,000	93.3	41,614	2,273,000	973,000
California	99.3	538,100	14,070,000	105,678,000	99.3	569,000	13,746,000	106,147,000	99.3	642,857	14,826,000	109,770,000
Total United States	95.7	2,437,600	42,729,000	139,242,000	95.7	2,456,700	44,100,000	139,641,000	95.4	2,468,285	42,217,000	144,017,000
Texas Gulf Coast	100.0	433,700	5,338,000	7,114,000	100.0	418,000	5,484,000	7,049,000	100.0	429,585	5,579,000	10,792,000
Louisiana Gulf Coast	100.0	117,000	1,171,000	983,000	100.0	112,400	1,382,000	1,098,000	100.0	108,514	1,877,000	3,818,000

(1) Per cent of refinery capacity represented. (2) Daily crude runs to stills. (3) Gasoline stocks. (4) Gas and fuel oil stocks.

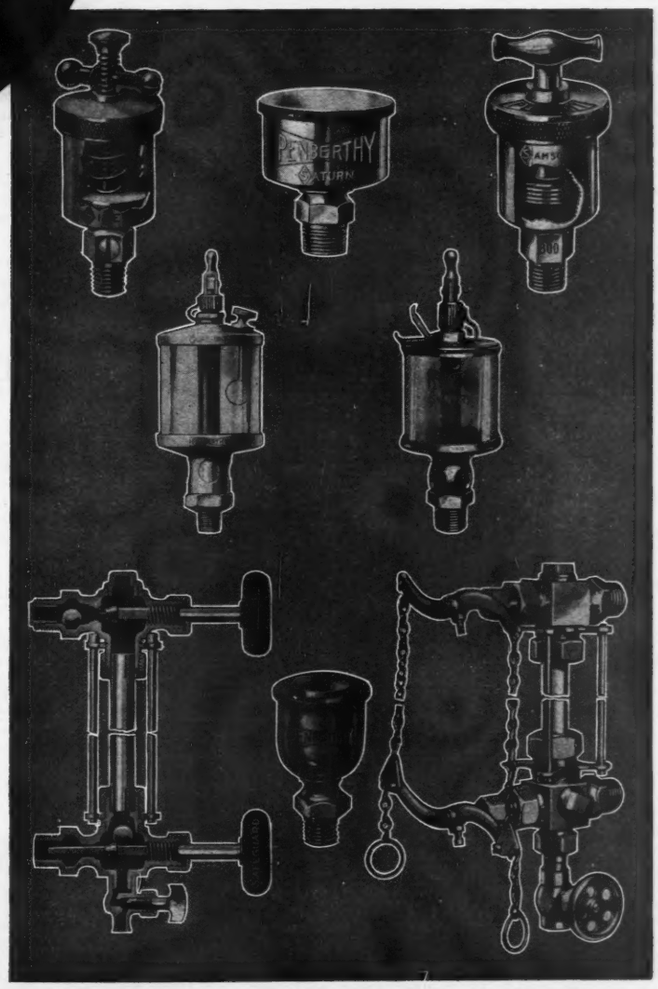


Data for 1930 based on weekly reports of the American Petroleum Institute. Data for 1929 derived from monthly reports of the Bureau of Mines, Department of Commerce. Figures for last week not shown in graph but are included in above tables.



ECONOMY SUGGESTS

PENBERTHY PRODUCTS



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ENGINEERS AND FIELD MEN DISCUSS PRORATION METHODS OF HOBBS POOL

By L. G. E. Bignell
Petroleum Engineering Editor

The problem of selecting a method of securing correct potentials of new wells in the Hobbs, New Mexico, Field was the subject under discussion by about 25 production engineers and field men who attended a meeting called and presided over by C. G. Staley, umpire for that area. The meeting was held in Hobbs on Friday, August 8.

No final plans were adopted as the members attending the meeting did not have authority to bind their companies to any definite methods but several plans were discussed freely by the engineers and production superintendents present and the final decision will be made by Umpire Staley and the executive committee for the operators, although it is not anticipated that any plan fully satisfactory to everyone interested can be worked out.

The field is being prorated now upon the basis of 40-acre units. The total amount of oil to be run by the pipe lines each day is limited to 35,000 bbls. and 25 per cent of this is prorated by dividing the total number of 40-acre units into 25 per cent of 35,000 bbls.

The remaining 75 per cent of 35,000 bbls. to be run to the pipe lines is prorated upon the potential capacity of the 40-acre unit as determined by open flow of each well for three hours. The first hour's gauge is disregarded and the amount of oil put in the tanks during the last two hours of the test is multiplied by 12 to give the well's potential for the 24 hours. If there is more than one well upon the lease the average of all the wells is used as potential for the 40-acre unit.

Most wells have been finished with 3-inch tubing and it is recommended that they be produced through this tubing. The control of the well will be maintained by the use of chokes or control valves and it is intended to so regulate the flow of each well as to permit it to flow all the time and at such rate as to produce the amount of oil that has been assigned to the 40-acre unit upon which the well is located.

In securing potential flow of new wells they are being produced through 3-inch tubing only, through the annular space between the 3-inch tubing and the 6⅝ or 7-inch flow string, or through both tubing and casing. It is customary to record pressure at well head during such flowing periods.

One plan suggested at the meeting to give potential of a well without open flowing it at any time was to tube it with 3-inch tubing and place at the tubing head recording pressure gauges. The well is then produced through choke or control valve for such time as the operator deems necessary at a given pressure and rate and these two factors are recorded upon a graph of cross section paper.

Plot Curve to Show Potential

It is claimed that there is a direct relation between recorded pressure at tubing head and the rate of production of oil into a tank that will develop a straight line if three points are plotted, each representing a test conducted nuder three conditions of rate of flow and tubing head pressure.

If cross section paper is used and the rate of production in barrels of oil per hour is plotted on the abscissas and pressure per square inch is plotted in pounds along the ordinate, a straight line passing through the three points secured by the three tests referred to about can be extended until it intersects the abscissas at the margin of the sheet. It is stated that the point of intersection of the line with the abscissas will give the potential of the well.

Such a method if used would permit wells to be tested for potential without opening them wide at any time and all engineers and production men seem to be in agreement that they do not want to open their wells to full head flow at any time if it can be avoided as they fear that such method of production would tend to cause rapid movement of bottom and edge water in this area and flood productive portions of the lime long before the oil has been extracted.

The umpire for the field has taken the matter under advisement for there are many questions involved and all interests do not look upon their production problems from the same viewpoint but with the past experience of many other Permian Basin fields to draw upon it would seem that there is little excuse for the operators in Hobbs duplicating those errors committed in other pools through lack of knowledge of conditions.

Just what will be the final decision as to method of determining potential of wells is hard to predict but whatever it may be the effect of putting it into practice will be followed with much interest by operators elsewhere for this question of equitable method of securing the true potential flow of a well is one that is receiving much consideration because of the general application of proration production methods to most fields.

OIL MAN'S CALENDAR

AUGUST

26-28—Chicago, National Air Races.

SEPTEMBER

2-4—Toronto, Ontario, North American Gas Tax Conference, King Edward Hotel.

4-5—Southwestern district, A.P.I. Division of Production, Buccaneer Hotel, Galveston, Tex.

8-12—Cincinnati, Ohio, eightieth meeting, American Chemical Society, Hotel Gibson.

17—Columbus, Ohio, Ohio Petroleum Marketers Association, Deshler-Wallick Hotel.

17-19—Atlantic City, N. J., National Petroleum Association, Hotel Traymore.

29-Oct. 4—Pittsburgh, Pa., Petroleum Section, National Safety Council.

OCTOBER

3—Tulsa, Okla., Board of Directors, American Petroleum Institute, Mayo Hotel.

4-11—Tulsa, Okla., International Petroleum Exposition and Congress.

6-11—Washington, D. C., sixth International Road Congress.

6-11—Washington, D. C., Exhibition, American Roadbuilders Association.

13-17—Atlantic City, N. J., American Gas Association, Auditorium.

14-16—Kansas City, Mo., Convention, Big Four State Jobbers.

16-25—London, England, Olympia Motor Show.

20-22—St. Louis, Mo., Petroleum Refiners division, National Association of Credit Men.

22-24—Pittsburgh, Pa., transportation meeting, Society of Automotive Engineers.

NOVEMBER

2-5—St. Louis, Mo., Marketing Congress, Independent Oil Men of America, Statler Hotel.

6-11—Berlin, Germany, International Automobile Show.

10-13—Chicago, eleventh annual meeting, American Petroleum Institute, Stevens Hotel.

DECEMBER

1-5—Memphis, Tenn., ninth annual Asphalt Paving Conference, the Asphalt Institute and Association of Asphalt Paving Technologists.

JANUARY

3-10—New York, National Automobile Show.

24-31—Chicago, National Automobile Show.

High Spots in Field News

MICHIGAN
Showing of high grade oil in Monroe County.

EAST CENTRAL TEXAS
Test in Smith County, 7 miles southeast of Van Pool, proves duster.

KANSAS
Rice County wildcat deepened 1 foot, made 733 bbls. Several new locations announced in Butler, Rice and McPherson Counties.

NORTH LOUISIANA-ARKANSAS
First commercial well in Lower Trinity in North Louisiana. Richland Parish gas field extended. Two more gassers in Mississippi.

NORTH TEXAS AND PANHANDLE
Good well in Cisco area stimulates activity. New area opened for production in Cooke County. Two Gray County wells swell Panhandle production.

CALIFORNIA
Curtailment program to be extended beyond expiration date, November 1. New deeper sand found at Potrero. Elwood well blows in, making 9,500 bbls.

OKLAHOMA
Wanette production extended quarter mile southeast. Oklahoma City Pool production 42,731 bbls. from 28 wells, with a total of 411 wells completed in field. Five new completions in one day.

GULF COAST
Pierce Junction has 6,200-bbl. well. Deep producer at Sweet Lake. Extension at Port Neches. Two good producers in new pool on west flank of Humble. Producer in new pool on north side of Vinton Field.

WEST TEXAS
Operators interested in possibility of another major pool in northern Ector and southern Andrews Counties following Fuhrman company showing. Small producers in O'Brien Pool and Fisher and Jones County Pools.

ROCKY MOUNTAIN AREA
Wyoming interested in Midway Dome test; another light oil field close to Casper would insure refinery supply. Three wells being completed in Hobbs area, New Mexico. Small show in Archuleta County, Colorado.

SOUTHWEST TEXAS
Rumor of refinery at Corpus Christi and pipe line to take Pettus crude. Possible new oil and gas pools in Southwest Texas. Full 24-hour gauge in Darst Creek showed 156,700 bbls.; new allowable daily runs will be 42,175 bbls.

Late Fields

GULF COAST

HOUSTON, Tex., Aug. 12.—Two new good producers have been added to the new pool being developed on the west flank of the Humble Dome. These are Rio Bravo Oil Co.'s No. 4 fee, Block 4, Bender South Addition, which came in flowing at the rate of 550 bbls. daily at 3,898 feet, and Sun Oil Co.'s No. 10 Bender, flowing 1,400 bbls. at 4,425 feet. In the new pool on the north side of the Vinton Field, Vinton Petroleum Co.'s No. 8 Matilda Gray has been completed flowing an estimated 300 bbls. daily from sandy shale at a total depth of slightly below 3,300 feet. Other completions at the opening of the week included Humphreys Corp.'s No. 1 West-Schenk, at Blue Ridge, an old well on the south flank deepened to 3,368 feet, it came in flowing 800 bbls. of fluid daily, 14 per cent water.

MICHIGAN

MUSKEGON, Mich., Aug. 12.—A new oil well and a new gas well extended the future possibilities of the Mount Pleasant area over the week end. Most important of two developments was the daily flow of about 1,000,000 feet of gas struck in the Benedum-Trees Oil Co.'s No. 1 Grove, NW NW SE, Section 14-15n-7w, Sheridan Township, Mecosta County, about 6 miles northwest of the Broomfield Township gassers and more than 20 miles west of the proved Mount Pleasant Field. Gas was struck in the Marshall formation at a depth of 1,395 feet. The well is near the village of Barryton.

The New York Petroleum Royalty Corp.'s No. 1 Wezensky, south offset to No. 1 P. J. Marthey, discovery well in the Leaton Pool, was brought in as a 130-bbl. oil well in the Dundee at about 3,670 feet. It is the third well completed in Section 19, Denver Township, within sight of the village of Leaton.

OKLAHOMA

J. H. Gwin Drilling Co.'s No. 1 Gregg, SE cor. SW, Section 23-6-3, extended the production in the Wanette Field a quarter mile southeast. The well is showing for 200 bbls. a day. Tanks are

(Continued on Page 152)

MAGNETIC STORM

Tucson observatory of the United States Coast and Geodetic Survey reports a moderate magnetic storm starting at 7 a.m., August 5 and ending at 10 a.m., August 9, central standard time. Their telegrams are as follows:

"Storm began fifth. Thirteen. Moderate."

"Storm ended Ninth. Sixteen."

SCORE CARD ON OIL PRODUCTION

Below is shown allotted average daily production in the United States, April to December, inclusive, suggested by the Committee on Economics of the Federal Oil Conservation Board, and the actual daily average production during the week ending August 9:

	Allotted (bbls.)	Actual (bbls.)	Over (bbls.)	Under (bbls.)
California	610,000	613,900	3,900	.....
Oklahoma	655,000	560,075	.....	94,925
Texas	750,000	834,244	84,244	.....
Others	480,000	470,040	.....	9,960
Total	2,495,000	2,478,259	88,144	104,885

Net underproduction 16,741 bbls. daily.

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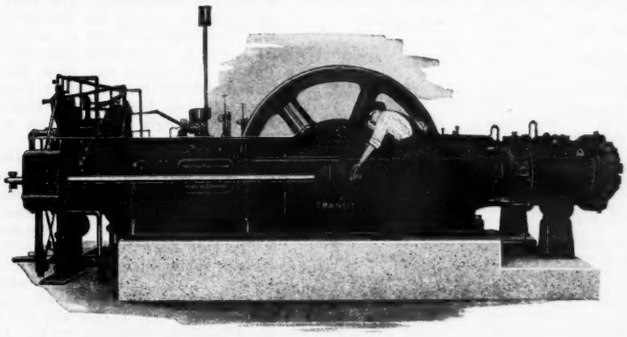
In designing the regulating valve mechanism, care has been taken to keep the proportion of gas and air uniform for every position from no load to full load. Special arrangements have been made for insuring a very thorough mixture of gas and air as they enter the cylinders. This results in a quick burning mixture, insuring full expansion and the highest fuel efficiency.



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Oklahoma Output Close to Requirement

Tatums Pool, in Carter County, Put Under Proration. Oklahoma City Pool Producing Area Extended to the Northwest

By W. A. Spinney
Staff Correspondent, Oklahoma Fields

The State's production is being kept within a few thousand barrels of the estimated requirements by operators. The daily average gauges for the week ending August 9 were approximately 560,000 bbls. During the week the Tatums Pool in Carter County was put under the statewide proration plan. It is the first pool in the southern part of the State to be curtailed. The producing area in the Oklahoma City Pool was extended to the northwest, bringing the producing area within a quarter of a mile of the city limits. Century Petroleum Co.'s No. 1 Wyatt, NE cor. NW NW, Section 2-11-3w, was bailed in and after cleaning itself was shut in to install another separator. The well was estimated to be 3,000 bbls. of oil and 125,000,000 feet of gas. The completion of the well had much to do with proving up the northwest part of the field and has spread the production nearer the city limits.

The old producing wells in the Oklahoma City Pool were shut in Saturday, August 9, for a three-day period to allow the pipe line companies to clear up the storage oil. The only wells allowed to produce are the underproduced wells and the new producers. During the past week the average daily production from the Oklahoma City Pool has been around 100,000 bbls. a day while the pipe line companies had agreed to take a maximum of only 85,000 bbls. a day.

Jones Brothers and the Blackwell Oil & Gas Co.'s No. 1 Sullivan, E half SW NW SW, Section 1-11-3w, on a small tract, was completed making 655 bbls. the first hour and 650 bbls. the second hour. The gas was estimated at 35,000,000 feet. This well and Indian Territory Illuminating Oil Co.'s No. 1 Phillips, ran together at approximately 4,660 feet. Considerable time was lost while the hole was being straightened.

The Head Petroleum Corp.'s No. 1 Community, SE cor. NW SE, Section 34-11-3w, a wildcat southwest of the main field, had a showing of gas at 5,005 feet and was preparing to land the 9-inch casing at that depth.

The new potential gauges from the Konawa Pool, in Seminole County, were around 76,000 bbls. a day on the recent tests made the first part of the month.

Wanette Extension Test

An attempt to extend the production in the Wanette Pool, in the southern part of Pottawatomie County, to the south will be made by Ford and others' No. 1 in the NE cor. NW, Section 4-5-3, between the city of Wanette and the Canadian River. The location is a wildcat and may spread the field several miles.

The south end of the field in Cleveland County does not look promising some of the tests in that area after being bailed down refuse to flow. Indian Territory Illuminating Oil Co.'s No. 1 M. Reynolds, NE cor. NW, Section 6-10-2w, is 6,705 feet and made a few flows into the derrick after bailing for several days. Same company's No. 2 Reynolds, SE cor. NE NW, Section 6-10-2w, was bailed down several thousand feet and was showing oil from a total depth of 6,695 feet. Continental Oil Co.'s No. 2 Sudik, NE cor. NW NE, Section 6-10-2w, was bailed to within 35 feet of bottom with the total depth being 6,644 feet and refuses to flow.

Interest is turning to the west side of the field where the Shell Petroleum Corp.'s No. 1 Egermeier, NE cor. SW, Section 23-11-3w, the most westerly test in the Oklahoma City Pool, was bottomed at 6,627 feet in Simpson sand with the cement plugs drilled. The test was bailed down 1,800 feet, before it showed signs of making a flow. The well made 2,043 bbls. the first 13 hours. It extends production a quarter of a mile to the west and a quarter mile to the south on the west side of the Oklahoma City Pool.

The Plains Petroleum Co. and Denver Producing & Refining Co. completed their first well in the Oklahoma City Pool during the week. No. 1 Whitten, CEL NW NW, Section 14-11-3w, on the west side of the pool, made 1,582 bbls. the first seven hours. The gas volume was estimated to be 20,000,000 feet a day. The total depth of the well is 6,650 feet in Simpson sand.

On the same 10 acres the Indian Territory Illuminating Oil Co.'s No. 1 Boulevard View, SW cor. NW NW, Section was bailing down. The gas pressure was apparently not strong enough to make it flow. The well later made 891 bbls. the first 14 hours from a total depth of 6,650 feet.

Oklahoma City Wildcats

The wildcat tests near the Oklahoma City Pool were quiet during the week. Mid-Kansas Oil & Gas Co. and Ramsey Petroleum Co.'s No. 1 Messer, SW cor., Section 32-14-3w, was waiting for cement to set at a total depth of 6,346 feet. Drilling operations are expected to be resumed in a few days.

Prairie Oil & Gas Co. and Tom Slick Oil Co.'s No. 1 Dills, SE cor. NW, Section 17-13-3w, was shut down at 6,812 feet with water in the hole. It may be abandoned.

Magnolia Petroleum Co. and Ramsey Petroleum Co.'s No. 1 Johnson, NE cor. SW, Section 35-13-3w, was drilling in lime at 7,195 feet.

Ryan Consolidated Corp.'s No. 1 Lawton, NE cor. NW, Section 3-11-2w, was drilling in Sylvan shale at 6,920 feet, with nothing showing.

Kessler Petroleum Co. has purchased the half interest of F. C. Hall in the Hall & Briscoe properties in the Oklahoma Field for the reported consideration of $2,000,000, part cash and part in oil. Powell Briscoe, the other half owner, did not sell. The transaction does not include the interests held by Hall & Briscoe outside of the Oklahoma City Pool which are scattered in all parts of the State.

J. M. Kessler, president of Kessler Petroleum Co., announced there would be no change in the operation of the leases. The properties consist of about 160 acres of proven and semiproven leases. Forty-eight acres in Section 10-11-3w, with one producing well and four others drilling and one producing well in Section 10-11-3w which were both completed as big producers. The company has other acreage including several blocks in the Central Addition, Block 8, of Chapman-Levy Addition, Block 11 of South Highland Addition and Block 22 of Walnut Grove Addition, inside the city limits at Oklahoma City. The transaction is one of the largest reported in the Oklahoma City Pool, ranking with the Ramsey Petroleum Co. and the Mid-Kansas Oil & Gas Co.'s sale shortly after the discovery of oil in December, 1928. The Kessler Petroleum Co. was formed about 18 months ago and has holdings in Oklahoma, West Texas and Lea County, New Mexico.

Hall & Briscoe drilled the first producing well in Section 10-11-3w, and extended production more than a mile to the west. The well made 9,740 bbls. the first 12 hours.

Oklahoma City Completions

Indian Territory Illuminating Oil Co. was the only company in the Oklahoma City Field to complete wells the first part of the week. No. 4 Watters, SW cor. NW NE, Section 25-11-3w, made 26 bbls. of oil the first 30 minutes and 1,888 bbls. the first 20 hours and 10 minutes. The well is producing from the Silicious lime at 6,465-73 feet. The recent wells completed from the Silicious lime pay in the Oklahoma City Field do not have the enormous flow the earlier wells had and some express the opinion that the pressure is declining. The other well completed was No. 2 Lemon, SE cor. SW SE, Section 11-11-3w. It made 152 bbls. the first hour and the gas flow was estimated to be 18,000,000 feet. It made 4,502 bbls. the first 24 hours.

A suit has been filed to halt the drilling of a test well inside the city limits of Oklahoma City. The first direct appeal to the district court from a decision of the city's adjustment board in the city lot controversies was filed during the week by the Rock Island Railway Co. and Phillips Petroleum Co. The suit asked for a reversal of the board's ruling allowing E. W. Jones, F. D. Jones and the Blackwell Oil & Gas Co. to drill a test well on the S half of Block 8, Minnie Page addition.

The Blackwell Oil & Gas Co. sought a permit to drill on Blocks 8 and 9, but the adjustment board ruled the test well could be drilled only if the royalty interests were shared with owners in Block 7. The permit had been refused because the area comprising of Blocks 8 and 9 did not comply with the area specifications of the city ordinances. The Rock Island Railway Co. claims the Blackwell Oil & Gas Co. does not hold a valid lease on 51 per cent of the lots affected, but the Phillips Petroleum Co. does, having obtained a lease from the Rock Island. The area affected includes the three blocks east of Georgia Avenue and south of Fourth Street.

In the area surrounding the Oklahoma City Pool, activity is slowing down. In the northeastern part of the county another wildcat test may be drilled by the Tom Slick Co., which recently completed a dry hole near Jones. A survey of the records shows little acreage available for leasing in this district, and what acreage has changed hands usually goes at a high figure. The Gypsy Oil Co. holds a large block in Township 13-4w. Attempts to unitize holdings in this township for a test well have failed and there has been little activity in recent months.

In the southwestern part of the county the Amerada Petroleum Corp. has blocked in Township 11-4w, other major oil companies have taken checkerboard tracts.

Some activity is expected soon in Townships 12-2w and 13-2w, where the Indian Territory Illuminating Oil Co. has attempted to work the geology of the area. Since the acreage is cut up and divided among several different operators indications are it will be some time before a unit pool agreement can be completed.

Little is expected in the way of new

(Continued on Page 74)

WILDCAT OPERATIONS IN OKLAHOMA

(Descriptions are East and North unless marked otherwise)

NORTHERN OKLAHOMA

ALFALFA COUNTY

Company, farm and location—	Remarks:
Smith Brothers' No. 1 Forbes, SE cor. NW NW Sec. 12-27-11w	Shut down 1,232 ft.
J. W. Bailey's No. 1 Acre, SW cor. NE Sec. 14-24-11w	Rigging up standard tools 4,660 ft.; cleaning out.

BECKHAM COUNTY

Ray Johnson and J. R. Cuniff's No. 1 Brower, C NW Sec. 29-10-22w	Drlg. 3,789 ft.
Producers Exploration Co.'s No. 1 Sidell, SE cor. SW SW Sec. 17-9-22w	Shut down 2,402 ft.
Carson et al's No. 1 Danby, SW cor. SE NE Sec. 20-8-22w	Shut down 1,575 ft.

BLAINE COUNTY

Lowen et al's No. 1 Unknown, NW cor. SW NW Sec. 17-16-11w	Spudded and shut down.
Washoma Oil Co. et al's No. 1 Phillips, C NW SW Sec. 13-19-10w	Shut down 3,730 ft.

CADDO COUNTY

Simms Pet. Co.'s No. 1 Cobsa, SW NW Sec. 24-6-11w	Rig.
W. J. Hartley's No. 1 Galbreath, SE cor. NW SE Sec. 29-5-12w	Shut down 3,394 ft.

CHEROKEE COUNTY

Weaver & Proctor's No. 1 Benge, NE SE Sec. 8-14-21	Drlg. 405 ft.

CLEVELAND COUNTY

Harris et al's No. 1 Highbee, SE NW Sec. 20-6-1	Drlg. 6,518 ft.
Daniels & LeWright's No. 1 Vandever, C SW Sec. 15-7-1w	Shut down 3,130 ft.

COAL COUNTY

A. M. Van Orden's No. 1 Jamison, SE NW Sec. 31-1-9	Shut down 1,600 ft.
Blackwell O. & G. Co.'s No. 1 L. Jackson, NW cor. Sec. 26-3-9	Drlg. 2,650 ft.
W. E. McGraw's No. 1 King, C SW NE Sec. 11-1-8e	Shut down 3,030 ft.

COMANCHE COUNTY

Croy & Young's No. 1 Cline, NW NE NE Sec. 8-3-10w	Rig.
Shasta Oil Co.'s No. 1 Romwalt, SW NW Sec. 11-2-10w	Drlg. 1,709 ft.
G. W. Stogner's No. 1 Doebel, C SW SW Sec. 3-3-9w	Shut down 1,450 ft.
Green et al's No. 1 Wilson, C NE SW Sec. 14-1-12w	Shut down 4,055 ft.

GARFIELD COUNTY

Shell Petroleum Corp.'s No. 1 Loomis, C NW NW Sec. 32-23-4w	Wilcox 6,132 ft.; drlg. 6,222 ft.
E. L. Love et al's No. 1 White, SE cor. NW Sec. 9-24-6w	Drlg. 5,590 ft.

GRADY COUNTY

J. V. Bailey's No. 1 Hubbard, C NE NW Sec. 1-10-6w	Shut down 100 ft.
J. M. Henry et al's No. 1 Abraham, SE cor. NW Sec. 4-5-8w	Rig.

GRANT COUNTY

Bu-Vi-Bar and Amerada's No. 1 Hurst, C SW Sec. 25-26-5w	Drlg. 2,355 ft.
Cowden et al's No. 2 Vollmer, CEL NE SW Sec. 22-26-4w	Shut down 5,640 ft.

GARVIN COUNTY

McMinn et al's No. 1 Carson, NE NW Sec. 5-3-4w	Drlg. 80 ft.
Nelson et al's No. 1 Strickland, NE NW Sec. 10-4-3w	Shut down 2,880 ft.

GREER COUNTY

I. T. I. O. et al's No. 1 fee, C SW NE Sec. 17-6-24w	Shut down 2,340 ft.

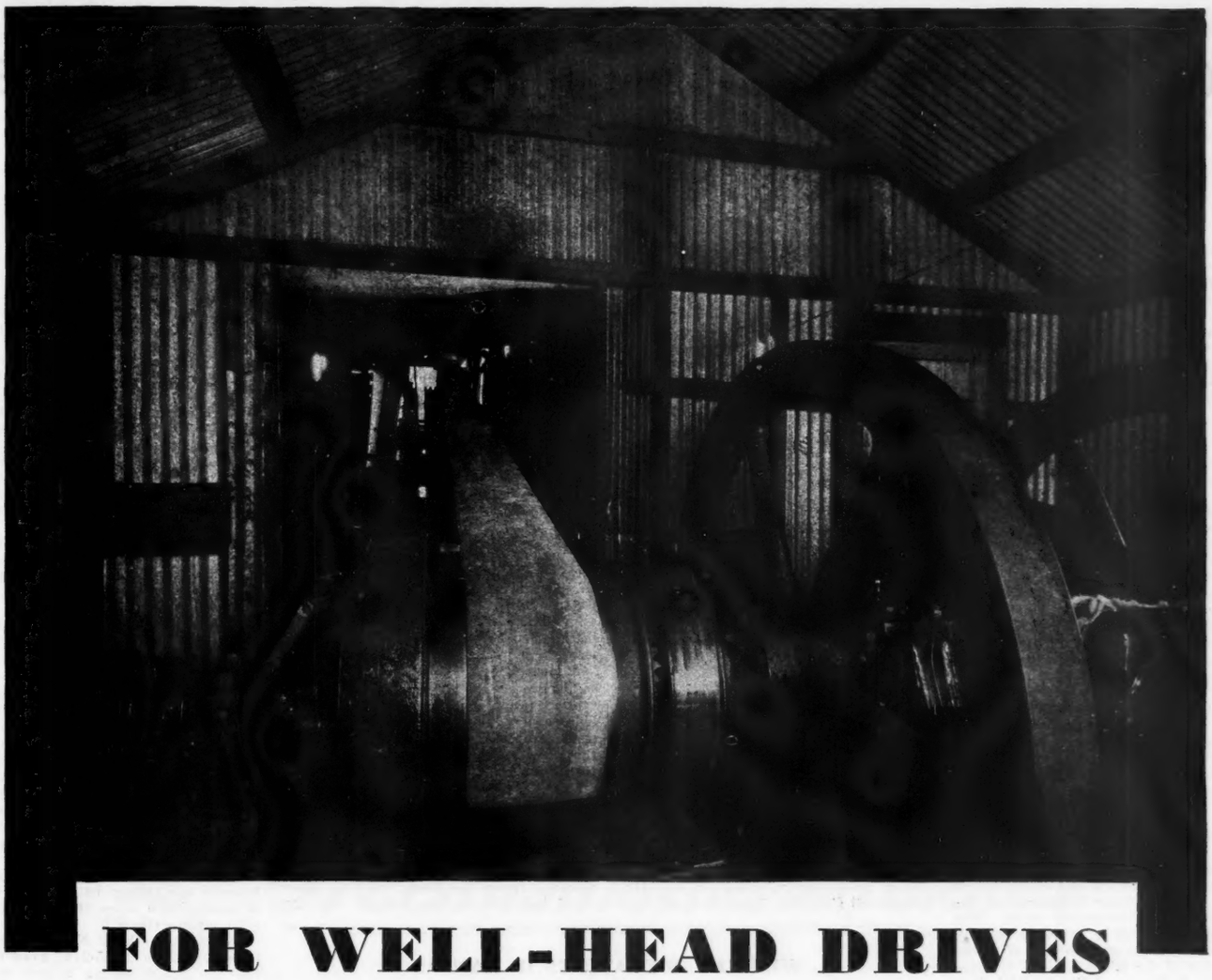
HARMON COUNTY

Harmon-Tex Oil Co.'s No. 1 Hoadley, NE cor. Sec. 17-4-24w	Drlg. 2,320 ft.
S. M. Stauffer's No. 1 Castleman, SW NE Sec. 8-4-26w	Shut down 625 ft.

HARPER COUNTY

Empire's No. 1 Bruce, C NE SW Sec. 12-25-20w	Fishing 5,570 ft.

(Continued on Page 119)



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Sedgwick and McPherson Lead Kansas

Most Active in Kansas Development Work. Twenty-One New Locations in the State During the Week. Eastborough Pool Busy

By W. A. Spinney
Staff Correspondent, Kansas Fields

The production of Kansas is being kept at a steady average. The daily production for the week ending August 9 was approximately 117,300 bbls., a gain of about 1,100 bbls. from the previous week.

Sedgwick and McPherson Counties are leading in development work in the State. Locations for new operations in the State total 21 for the week ending August 6. McPherson County had seven, Sedgwick County six, and Greenwood, Woodson, Coffey, Reno, Gove, Harvey, Russell and Stevens Counties each had one.

The ninth well completed in the Eastborough Pool, in Sedgwick County, is the Vickers Petroleum Co. and others' No. 2 J. Keys, NW cor. NE Section 30-27-2. It appears to be a 200-bbl. well. It was swabbed eight hours and made 103 bbls. The oil was found in chat at 2,942-74 feet. One location east of the well is the same company's No. 1 Keys, which is producing from the Simpson sand at the rate of 3,000 bbls. a day. No. 2 Keys will be given a swabbing test at its present depth and later it may be drilled to the Simpson sand.

Two more locations were announced during the week for tests near the north side of the Eastborough Pool. National Refining Co. and Spencer's No. 1 Murdock, SW cor. SE SE Section 18-27-2, a half mile north of the Derby Oil Co.'s No. 1 Eastborough Estates, a 1,000-bbl. well.

Eastborough Pool Active

The most active area in the State outside of the Hugoton gas area in the southwestern part of Kansas is the Eastborough Pool, in Sedgwick County, where 17 new rigs are now in operation, including the nine completed wells. The area now looms as a major producing field in the Kansas production. With the completion of the Blankinship Petroleum Co.'s No. 1 Shaffer, NE cor. NW, Section 30-27-2, making 50 bbls. of oil in 15 minutes. It was estimated to be a 3,000-bbl. well if allowed to produce wide open. Not having the pipe line facilities it was pinched in and made 520 bbls. in six and one-half hours. The only deep sand producer in the pool is the Vickers Petroleum Co. and others' No. 1 Keys, NE cor. NW NE, Section 30-27-2, which flowed 12 bbls. an hour on recent tests from the Simpson sand at 3,238-42 feet. The Prairie Pipe Line Co. is taking around 200 bbls. a day from this well.

Fisher & Lauck's No. 2 trustee, SW cor. SE, Section 19-27-2, is rated as a 1,000-bbl. well. No. 1 trustee, NE cor. SW SE Section 19-27-2 is pumping about 120 bbls. a day. Derby Oil Co.'s No. 1 Eastborough estates, SE cor. SW NE, Section 19-27-2, in the north end of the pool, is rated as an 850-bbl. well. It extended production more than a quarter mile north. In the south end of the pool Fisher & Lauck's No. 1 Shaffer, NE cor. SE NW, Section 30-27-2, is still shut in waiting for a pipe line connection. It is rated to be good for between 150 and 200 bbls. in the chat. E. W. Marland, Inc. and others' No. 1 Mackey, SE cor. NW SW, Section 30-27-2, is under proration and is pumping around 20 bbls. a day. Derby Oil Co.'s No. 1 Cloud, SE cor. SW, Section 19-27-2, on a 10-acre tract, made 1,262 bbls. the first 24 hours.

Six Forty Oil Co.'s No. 1 Braley Airport, SE cor. SW NW, Section 6-28-2, is spudding. A new location has been announced by Findless and others' No. 1 Carlton, SW cor. NW NW, Section 23-28-1, Sedgwick County.

Northeast of the Eastborough Pool, Spencer & Wixson's No. 1 Rounds, SW cor. SE, Section 17-27-2, found water in the Simpson sand at 3,305 feet, and was drilled to a total depth of 3,412 feet where it may be abandoned.

The new Eastborough Pool now has two known producing sands, one the chat at 2,950 feet, and the other the Simpson sand at 3,300 feet. The producing area has spread nearly 1½ miles north and south and about three-quarters of a mile wide. The new increase in production has restored Sedgwick County to an important place in the State's production column as the older producing areas in the country are declining.

Rice County Wildcat

The new Rice County wildcat is to be drilled deeper in an attempt to increase its flow. The well was drilled by Shell Petroleum Corp. J. H. Tatlock and others' No. 1 Ploog, in Section 33-18-9w. It is the desire of the interested companies to test the Silicious lime by deeper drilling. The well has been slopping over since it first found the pay, making about 3 bbls. a day of 49 gravity oil from a total depth of 3,252 feet. The wildcat is located on a 10,000-acre unitized block and the well is considered important as it may open another Silicious lime pool in the central western part of the State. It made 120 bbls. the first 24 hours when tested and is only about 2 feet in the pay horizon. Two of the three 750-bbl. tanks on the lease are about full of oil. The area is still without a pipe line. It was drilled 1 foot deeper and made an average of 30 bbls. an hour.

Hugoton Gas Extension

The Hugoton gas field, with a potential of 285,000,000 feet of gas from 35 completed wells, is the largest gas producing area in the State of Kansas. The producing area was extended by the Hydraulic Oil Co.'s No. 1 in the C SE Section 22-34-43w, Morton County. It found 1,000,000 feet of gas at 2,683 feet. The well is about 4½ miles from the Colorado state line and many express the opinion the gas field may extend into Colorado. Recently many individual operators and major oil companies have taken acreage in Bacca County, Colorado. The Hydraulic company's well is 15 miles west of production and had several million feet of gas at 1,300 feet, where the rig burned down.

Voshell Gauge

The new potential gauges of the Voshell Pool in McPherson County, taken August 1 and 2, show the 90 completed wells had a potential of 60,198 bbls., a gain of approximately 6,000 bbls. over the previous period. The gain is due to the fact that most of the wells had been shut down for several days prior to the tests on account of having produced their allowed amounts for the period and the installation throughout the field of permanent pumping equipment during the last month.

The average daily pipe line runs for current month will be approximately 10,000 bbls. a day. Operators are allowed to produce approximately 16¾ per cent of the potential production from August 1 to September 1. It was suggested by the umpire, T. C. Johnson, that all producers will continue to curtail under the same plan and regulations from September 1 to October 1. The advisability of further proration will depend upon the existing conditions at that time. According to the umpire's report the Derby Oil Co.'s lease in N half SE Section 9-21-3w, has the largest potential production with a total of 8,015 bbls. a day from eight wells. The property has produced approximately 550,000 bbls. of oil to August 1.

In the Ritz Pool, in McPherson County, The Texas Company is starting No. 3 Munn, NE cor. SE NE Section 12-20-2w. Mid-Kansas Oil & Gas Co. is moving in a rig for No. 1 Stevens, SW cor. NE Section 30-19-1w, McPherson County, in the Decker gas field, north of the Ritz Pool. McPherson Oil & Gas Co. has announced four new locations in the Decker gas field: No. 1 Fleming, C NW Section 11-19-2w; No. 1 Hill, C NE Section 10-19-2w; No. 1 Lindberg, C NE Section 15-19-2w; No. 1 Lovitt, C NW Section 13-19-2w.

The northern part of Harvey County is being developed. The Texas Company announces a new location for No. 1 Zook, NW cor. NE SW Section 36-22-2, offsetting the Shell Petroleum Corp.'s No. 1 Palmer, which recently increased its flow to around 1,000 bbls. a day when it was cleaned out.

During the years from 1916 to 1929 the Empire Oil & Refining Co. has produced 14,556,000 bbls. of oil for the landowners in Butler County. The company has 56,397 acres under lease and of this amount 23,612 acres are productive. Some of the properties have been drilled up while others are still being developed. The Koogler lease, southwest of Eldorado, has more than 100 producing wells and new producers are being added regularly. The Empire company is the largest producer in Butler County. It is believed the county has a large number of undeveloped acres that are underlaid with oil reservoirs.

Swain and others' No. 1 Hawthorne, C NW, Section 21-25-24w, Ford County, has the 8-inch casing landed at 3,600 feet. The wildcat is located 10 miles northwest of Dodge City and is a number of miles from any other production. The test was first located on surface geology but since the area has been core drilled. The test is to be drilled to the 5,000-foot level.

Greenwood Development

Greenwood County development has slowed down since the pipe line proration has been effective in the spring of the year. The activity which has been in progress in the western part of the State may slow up and cause a revival of operations in the eastern counties. The low cost of development and cheap operation of producing wells in the eastern section of the State are factors which may induce oil companies to look at their holdings in the trend regions. The recent finding of oil was by the Aladdin Petroleum Corp. at its semiwildcat, west of Madison in Greenwood County. North of Hamilton in the Patterson Pool, the Empire Oil & Refining Co., Syndicate Oil Co. and Prairie Oil & Gas Co. have considerable development work to do. In the Lamont area in the northeastern part of the county, the Empire Oil & Refining Co. is expected to drill several tests.

In Rush County, the Syndicate Oil Co. and others' No. 1 Mohr, C SW, Section 2-18-16w, has landed the casing at 3,480 feet, where a showing of gas was found. The test is expected to be drilled into the sand in a few days. It is about a half mile from the same company's No. 1 Etil, which was completed for 26,000,000 feet of gas in the same horizon. The wildcat test of the McPherson Oil & Gas Co.'s No. 1 Brack, C NW, Section 24-17-16w, had a showing of oil at 3,500 feet, where it made 9 bbls. of oil with a showing of water.

Butler County

Empire Oil & Refining Co. and McCulloch Oil Co.'s No. 1 Lilley, SW cor.

(Continued on Page 136)

WILDCAT OPERATIONS IN KANSAS

(Descriptions are East unless marked otherwise)

BARBER COUNTY

Company, farm and location—	Remarks:
Barbara Oil Co.'s No. 1 Hamblin, SW NW Sec. 24-33-13w	Fishing 4,487-4,508 ft.; $0,000,000 ft. gas.
Phillips Pet. Co.'s No. 1 Powell, SE cor. SE Sec. 11-32-10w	Drlg. 4,450 ft.

BARTON COUNTY

Slick and Prairie's No. 1 Rude, SW cor. Sec. 11-16-13w	Drlg. 2,185 ft.

BUTLER COUNTY

McCulloch and Empire's No. 1 Lilley, SW NW NW Sec. 23-23-5	Rig.
Pioneer Pet. Co.'s No. 1 Crist, NW SE Sec. 33-26-4	Drlg. 2,685 ft.
Farrell et al's No. 1 Sutton, NW cor. Sec. 18-28-7	Drlg. 610 ft.
Gypsy Oil Co.'s No. 1 Osborne, NW SE Sec. 22-26-3	Drlg. 1,980 ft.
Joe Liggett's No. 1 Guanther, C SE NE NW Sec. 29-26-7	Drlg. 2,910 ft.

CHAUTAUQUA COUNTY

Leighty et al's No. 1 Carr, NW SE Sec. 5-33-9	Rig.

CLARK COUNTY

Watchorn's No. 2 Morrison, NW NE Sec. 20-32-21w	Shut down 6,570 ft.

CLAY COUNTY

Crystal Oil et al's No. 1 Tivier, SW cor. Sec. 19-8-2	Drlg. 1,800 ft.

COFFEY COUNTY

McGregor's No. 1 Wood, NE NW SW Sec. 20-22-15	Drlg. 500 ft.
Ritchey et al's No. 1 Rossenmacher, C SE Sec. 36-22-13	Shut down 2,165 ft.
Roberts et al's No. 1 Hay, SW SE NW Sec. 32-22-15	Fishing 1,100 ft.

COWLEY COUNTY

Tom Fine's No. 1 Boyd, NW NE Sec. 32-32-4	Drlg. 2,130 ft.

DICKINSON COUNTY

Severs et al's No. 1 Lavengood, NE SW Sec. 13-13-2	Shut down 2,205 ft.
Kruger et al's No. 1 Diche, C NW NE NE Sec. 17-13-4	Shut down 2,935-43 ft.; water.
E. N. Morgan's No. 1 Whithair, NW SE Sec. 9-12-1	Drlg. 2,950 ft.

DOUGLAS COUNTY

Steinbuckel's No. 1 Unknown, SW NE NW Sec. 34-14-21	Shut down 1,100 ft.
Jenkins & Scott's No. 1 Haden, SE NW Sec. 10-12-17	Shut down 1,800 ft.

ELLIS COUNTY

Central Commercial Oil Co.'s No. 1 Helms, SE cor. NE Sec. 2-12-20w	Fishing 3,140 ft.
Streeter & Stearns' No. 1 Leiker, SW NE Sec. 26-13-20w	Drlg. 3,938 ft.
Byrene et al's No. 1 Fisher, NW SE Sec. 4-11-20w	Shut down 1,000 ft.
Rush Oil Co.'s No. 1 Gatewood, NW cor. NW Sec. 4-15-20w	Shut down 3,750 ft.

ELK COUNTY

Croft & Frazier's No. 1 Keys, SE NE Sec. 26-31-10	Drlg. 735 ft.

ELLSWORTH COUNTY

Slick et al's No. 1 Unknown, NW cor. Sec. 25-17-10w	Drlg. 1,250 ft.

FORD COUNTY

McNabb et al's No. 1 Fowler, C SE Sec. 26-27-22w	Abandoned 400 ft.
Swain et al's No. 1 Kenthorne, C NW Sec. 21-25-24w	Shut down 3,575 ft.

GOVE COUNTY

Valerius & Baucher Oil Co.'s No. 1 Todd, NW cor. Sec. 24-13-27w	Drlg. 2,100 ft.

GRAHAM COUNTY

Gulf Coast Oil Co.'s No. 1 Johnson, C S half Sec. 27-8-25w	Shut down 4,370 ft.
Naylor et al's No. 1 St. John, NW SE SE Sec. 27-8-25w	Drlg. 4,370 ft.

GRANT COUNTY

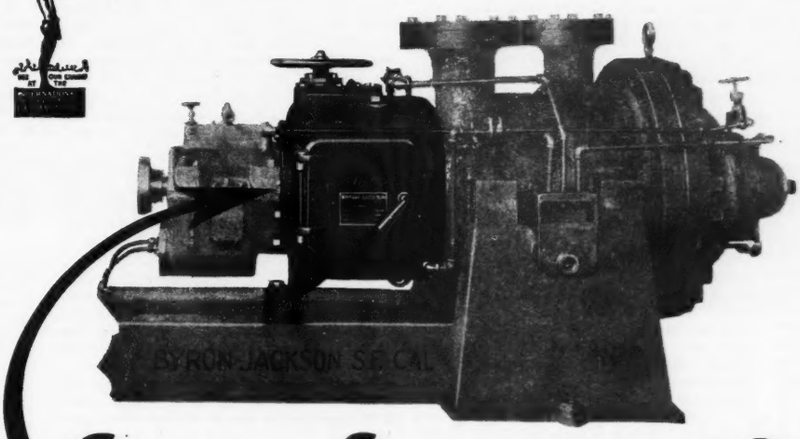
McKenna et al's No. 1 Sullivan, NE cor. Sec. 12-29-38w	Shut down 50 ft.

GREENWOOD COUNTY

Staats et al's No. 1 Swan, NE NW Sec. 3-25-12	Rig.
Harwood Oil Co.'s No. 1 Log, SW NE Sec. 20-25-10	Drlg. 1,045 ft.

(Continued on Page 119)

FLASHES STEAM SMOTHERED!



Steam Smothering Gland

The dread flash in refinery operation has been eliminated by Byron Jackson through the development of steam smothering in an enclosed chamber housing the packing gland of hot oil centrifugal pumps. The packing gland is operated by an external hand wheel. The chamber is kept filled with exhaust or wet steam while the pump is in operation. No injury to the operator or explosion can result from any flash that might occur.

Special features: Stuffing box extra deep, provided with cage ring at center for cold oil sealing. Packing gland actuated by means of lever, link and spring mechanism controlled by external hand wheel for safety of operator. Stop pin prevents unintentional complete removal of gland from stuffing box. Packing gland mechanism enclosed in cast iron housing to permit steam smothering of vapors escaping through stuffing box. Vent pipe leads away steam and fumes. Estimates will be freely given.

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Need for Outlet for Pettus Crude Felt

Rumor of Refinery at Corpus Christi With Pipe Line From the Field. Possible New Gas and Oil Pools Indicated

By B. D. Stevenson
Staff Correspondent, Southwest Texas Fields

SAN ANTONIO, Tex., Aug. 11.—Crying need for pipe line outlet for Pettus crude oil and rumors that Cosden will build a refinery at Corpus Christi and run a pipe line from the Pettus Field, along with the proration hearing at Austin and announcement of considerable new gas line to be laid in Southwest Texas by the United Gas Corp., were among the features of the week.

In the Pettus Field the sad disappointment was heralded when Grayburg Oil Co.'s No. 1-B Kimball, and Arkansas Fuel Oil Co.'s No. 1 Kimball, each a little east of the Grayburg discovery well 7 miles southwest of the field, ran into bad news in the shape of salt water at a depth where oil ought to have been. Possibility that Ed Price may have opened a new gas field southeast of the Pettus Field and that Union Producing Co.'s No. 10 Ray, some miles northeast, may have opened a new oil pool tempered the disappointments.

In the Laredo district there were some more completions in the proven fields and a gas well completed a year ago in the Cole gas field but from which no gas has been taken has turned to oil and is making 75 bbls. daily.

Pettus Crude Oil

Most of the Pettus production is going to storage. Buchanan & Ogden's No. 1 Townsite, Block 38, has been choked down to one-eighth inch and is making 400 bbls. and they are building storage ahead of accumulations. Humble and Moody-Seagraves have been moving some oil out of the field by tank car shipments. Several wells which have been completed for some time have no connections and are shut in. Posted price is $1.40 but none being taken but it is understood one major interest offered to take some at $1.15 per barrel.

The disappointments of the week were Grayburg Oil Co.'s No. 1-B Kimball and Arkansas Fuel Oil Co.'s No. 1 Kimball; No. 1-B Kimball, a quarter mile east of No. 1-A Kimball, Saturday was down 3,830 feet and had nothing and Arkansas Fuel Oil Co.'s No. 1 Kimball was down 3,880 feet and had nothing. Grayburg Oil Co.'s No. 1-A Kimball which came in some weeks ago got production at 3,568 feet. It was first reported a completion but is not a well yet and the hole probably is lost. Hence the southwest extension of the Pettus Field is still without actual production and the two wells just east of it got water sands where oil was had in No. 1-A Kimball. Grayburg's No. 1 Copeland which is a quarter of a mile west is down not to near the sand depths of No. 1-A Kimball and this week will reach the interesting depth.

Two happenings in that part of the country added interest and may make history. Ed Price's No. 1 Weiss southeast of the field got several million feet of gas spraying light oil. Union Producing Co.'s No. 10 Ray, northeast of the field, at 4,032 feet topped a sand and drilled to 4,040 feet. On an 11-minute drill stem test it filled 50 feet in oil and 350 feet in mud, sand and drilling fluid and has set casing.

On the townsite S.R.C. Oil Co. went too deep and at 3,960 feet had to back up in its test on Block 19. It is offset by a producer and is trying to plug back to the regular sand and make a well.

Live Oak County

After waiting a month for a heavy rig so as to set casing in its No. 1 Ross Boothe at the north end of the Cartwright gas field in Live Oak County, Houston Oil Co. started operations this week, reamed down to 3,300 feet where the pipe stuck in the hole and in attempting to pull it pulled in the derrick and wrecked most of the machinery except the boiler. The hole may be lost. Total depth is 5,257 feet. Gas production in that field is at 2,150 feet. It will be remembered that a month ago No. 1 Ross Boothe on a drill stem test of 12 minutes filled up 300 feet in oil. It is to all intents and purposes a wildcat well being in a much deeper sand than anything penetrated in that country thus far.

As a result of pulling in the derrick it may be some weeks before there is any interesting information from that locality. Even if the hole is salvaged there will be considerable delay.

Lion Oil Field

Among the wildcat features of the week is the Lion Oil Refining Co.'s No. 2 McFadden, 660-foot east offset to its discovery well on the McFadden ranch in the southern part of Victoria County. It got 225 feet of gas sand which was topped at 3,740 feet in No. 1 McFadden. The company had hoped for an oil well. Instead it found an enormous thickness of sand. It is now down around 4,000 feet and continuing to drill in hope of finding some oil. The sand was penetrated only a short distance in No. 1 and the revealed thickness of the sand makes it very interesting.

Guadalupe Wildcat

In the territory southwest of the Darst Creek Field where operators have been trying to work out a pool Adams & Lyles' No. 1 Otto Neitsch last week topped the chalk at 2,319 feet. It is a little higher than in another test they drilled nearby but may not be high enough to get pay. This week it should reach the Edwards lime.

Laredo District

Four oil wells in the Muckelroy-Escobas Pool in Zapata County, added 370 bbls. initial production to the Field. One well was for 125 bbls., one for 100 bbls., one for 65 bbls. and one for 80 bbls. It was a light week both in number of completions and their size. A fifth well was completed for gas spraying oil.

Killam in the Killam-Cuellar Pool completed a 100-bbl. oil well and a 20,000,000-foot gas well, the first his No. B-17 Cuellar and the other No. 25 A. Martinez. No. B-17 Cuellar was completed in sand at 1,531-35 feet and is in the pool proper. No. 25 A. Martinez completed at 1,616-23 feet is in Survey 75 somewhat north of the Killam-Cuellar Pool.

S. R. C. Oil Co. has closed a deal with the Vacuum Oil Co. to drill three 3,800-foot tests on a 10,000-acre block of leases including the Duval County Ranch Co. in northwestern Duval County. A little to the east of this there is a structure operators have been working on and the Southern Oil Co. has a hole now down 2,135 feet in its No. 2 Welder-Wood and it seems to be running higher than their No. 1 which was abandoned as a dry hole several months ago. The company is encouraged by the way the log is running but making slow time due to scarcity of water.

Williamson County

Scarcity of water has about forced the Chapman Pool and wildcat tests in Williamson County to suspend operations and will help out the proration plans.

Escobas Sale

S. R. C. Oil Co. has bought a considerable additional interest in acreage in Zapata County for a consideration of some $50,000. It is a half interest in the holdings of Sam Evans involving about 2,500 acres of leases laying to the east of the Escobas-Muckelroy Pool and west of the gas well completed some months ago by Harry Fansler.

Southwest Texas Production

Daily average production of the pools in the Southwest Texas area for the week ending August 9 follow:

SOUTHWEST TEXAS

Branyon	32
Bruner	19,883
Buchanan	180
Chapman	9,002
Dale	293
Darst Creek	46,463
Kingsville	143
Larremore	36
Luling	9,433
Lytton Springs	792
Manford	340
McMullen	35
Medina	22
Mirando	11,441
Pettus	6,434
Somerset	1,532
Yoast	320
Total	106,376
Week ending August 9	133,701
Decrease	27,325

WILDCAT OPERATIONS IN SOUTHWEST TEXAS

Company, farm and location—	Remarks:
ATASCOSA COUNTY	
Frontier Oil Co.'s No. 2 Boynton, 775 ft. SW of Brown-Fuller gas well	Spudded in.
Nute, Walder & Derden's No. 1 J. B. Young, 750 ft. W line, 370 ft. E line of 107-ac. tract in the Wm. Moore Sur.	Location.
BLANCO COUNTY	
Ben H. Ashe Pet. Corp.'s No. 1 Glasscock, moving in to drill on leases out of the Rodson block north of Blanco City	Location.
Hardy Sitton's No. 1 McMillan	Drlg. water well.
Lilies-Adams et al's No. 1 Stanford, 150 ft. to S line, 1,420 ft. to E line of James Stanford's No. 155	T. D. 385 ft.; drlg. in gray lime.
McCreary et al's No. 1 Schenling, 900 ft. to SE line, 600 ft. to SE line of J. A. Rouse No. 118 Sur., 4 miles SW from Blanco City	Spudded in and shut down; to complete title work.
J. R. Meeks' No. 1 Walker, Noel Nixon Sur. No. 23, 3 miles N from Blanco City	T. D. 335 ft.; drlg.
BASTROP COUNTY	
Judge Batts et al's No. 1 Alexander, 1,670 ft. N of S line, 528 ft. E of W line, Blk. 3, in the W. M. Eastland Sur., 3½ miles NE from Red Rock	T. D. 2,548 ft.; drlg. resumed.
Pacific Oil & Gas Co.'s No. 1 J. Spooner, 300 ft. from N line, 400 ft. from W line in the L. Lavenuz Sur., 4½ miles E from Cedar Creek	T. D. 2,125 ft.; shut down in chalk.
Pacific Oil & Gas Co.'s No. 1 J. M. Litton, 150 ft. N and W lines of tract	Location.
Majestic Pet. Co.'s No. 1 J. M. Breeding, 160 ft. from N line, 1,020 ft. from W line of 200-ac. tract, 940 varas from W line, 1,225 varas from S line of M. Andrews Sur., 13 miles W from Smithville	T. D. 500 ft.; shut down in shale.
BROOKS COUNTY	
Houston Oil Co. of Texas' No. 1 Wormser-Holbien, 1,550 ft. S, 2,650 ft. E of intersection of Lisandro Saenz & Manuel Saenz tracts, El Palo & Blanco de Maguellas grant, SW of Lasater discovery gas	Location.
Houston Oil Co.'s No. 2 Wormser, 200 ft. N of CSL, 964-ac. tract in the P. Maguellas Sur.	T. D. 2,792 ft.; drlg.
Humble Oil & Ref. Co.-Shell Pet. Corp.'s No. 2 Wm. Singers, 1,320 ft. W of E line, 1,800 ft. S of N line of Sec. 312, Alta Verde area, 7 miles SE from Lasater gas field	T. D. 4,500 ft.; heaving shale; preparing to set 9⅝-in. to protect hole.
BEE COUNTY	
Edw. M. Jones' No. 1 Rapp, 990 ft. SE of NW cor. Sec. 11, Ragley Subd., Jose Maria Urangua Sur.	T. D. 6,062 ft.; abandoned; hole lost; will skid derrick; was carried as proven test in error.
E. M. Jones' No. 2 Rapp, 1,065 ft. from N line, 1,065 ft. W line of lease, Tuleta district	Rigging up.
William F. Morgan and Independent Oil & Gas Co.'s No. 1 Quincy, C Blk. 9 of 11,000-ac. Quincy Subd. of Bee County	T. D. 2,000 ft.; drlg.; was carried as proven.
O'Neal & Catlett's No. 1 Pat Pugh	Location.
Ed Price's No. 1 Mrs. Laura E. Weiss, 200 ft. out of NW cor. of B.&B. 640-ac. Sur.	T. D. 4,314 ft.; estimated 20,000,000 ft. gas; carried as proven by error.
Simms Oil Co.'s No. 1 Halxmark, 830 ft. SE line, 2,952 ft. SW line of J. A. York Sur.	T. D. 1,900 ft.; shut down; carried as proven by error.

(Continued on Page 157)

COMPLETIONS

Darst Creek Pool—Guadalupe County

Gulf Production Co.'s No. 2 Malear, 200 feet southeast of northwest line, 650 feet northeast of southwest line, in the Jerome B. Alexander Survey, total depth 2,622 feet, completed flowing 540 bbls. in the Edwards (corrected footage). Same company's No. 4 Posey, 499 feet northeast of southwest line, 150 feet northwest of southeast line, in the J. R. Robinson Survey, total depth 2,616 feet, completed 691 bbls. (corrected footage). Same company's No. 5 Posey, 150 feet from south and west lines of tract in the J. R. Robinson Survey, total depth 2,610 feet, completed 510 bbls. initial production.

Pettus Pool—Bee County

Buchanan & Ogden's No. 1 Townsite, center of Block 38, Pettus Townsite, total depth 3,919 feet, completed, initial production 600 bbls. daily on three-sixteenths-inch choke, flowing 400 bbls. daily. Cosden Oil Co.'s No. 3 McKinney, 360 feet south line, 800 feet east line of tract in the South John Pace Survey, total depth 3,670 feet, estimated flow 300 bbls. Union Producing Co.'s No. 15 Ray, 150 feet south line, 150 feet east line of southeast corner of Pettus Townsuite, offset Houston Oil Co.'s No. 1 Beasley. Same company's No. 16 Ray, 150 feet east of Pettus Townsite, offset to Glasscock's No. 1 in Block 41, total depth 3,863 feet, completed, estimated 25,000,000 feet of gas spraying gasoline.

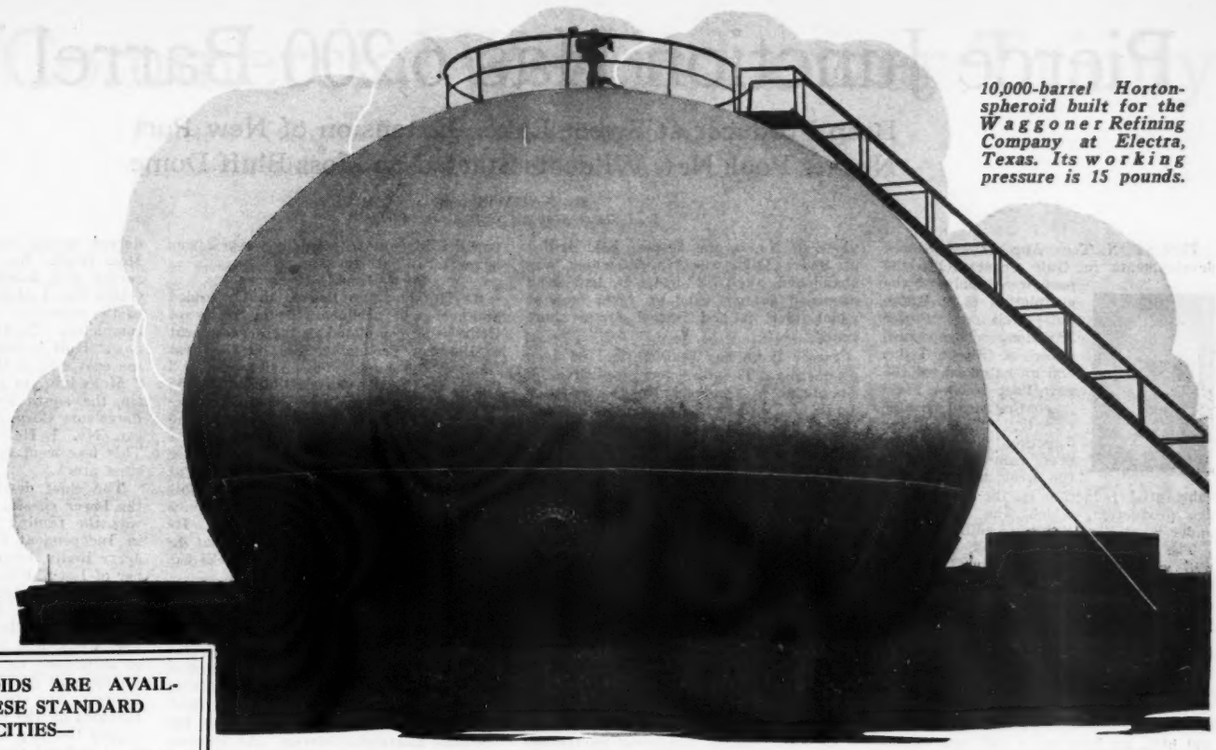
Kohler Pool—Duval County

South Texas Producing Co.'s No. 1 Peters, 2,310 feet north line, 450 feet west line, Survey 398; total depth 1,810 feet; completed, 20,000,000 feet of gas.

Chapman Pool—Williamson County

Anderson's No. 6 M. V. Lawrence, total depth 2,247 feet, completed, initial production 500 bbls., estimated. Same owner's No. 1-A T. P. Simmons, total depth 2,226 feet, estimated 1,500 bbls., completed. J. L. Collins & Co.'s No. 2

(Continued on Page 128)



10,000-barrel Hortonspheroid built for the Waggoner Refining Company at Electra, Texas. Its working pressure is 15 pounds.

HORTONSPHEROIDS ARE AVAILABLE IN THESE STANDARD CAPACITIES—

Capacity (in bbls.)	Pressure (in lbs.)	Diameter (in ft.)	Height (in ft.)
2,500	15	32'7"	25'3"
5,000	15	41'7"	32'6"
10,000	10 or 15	53'0"	39'5"
20,000	10 or 15	66'8"	48'0"

HORTONSPHERES ARE AVAILABLE IN THE FOLLOWING STANDARD CAPACITIES—

Capacity (in bbls.)	Pressure (in lbs.)	Diameter (in ft.)
5,000	25 pounds	38'0"
7,500	or over	43'9"
10,000		48'0"

The ideal shape for pressure storage containers

In their respective fields, the Hortonspheroid and the Hortonsphere are the "last word" in pressure storage containers—the products of years of research and experience.

The Hortonspheroid is a new type of tank for the storage of liquids that boil at normal temperatures and which therefore cannot be stored in ordinary tanks without excessive evaporation. Its unusual shape is determined mathematically to give the most economical use of material in the construction of a liquid storage tank which will withstand pressure. It is built for working pressures of 10 and 15 lbs.

Tests have shown that this much pressure will stop practically all evaporation losses with a wide range of volatile liquids such as Natural Gasoline. No standing losses occur when the maximum pressure attained under normal conditions is less than that at which the relief valve opens. Filling losses are considerably less than with ordinary storage tanks.

The Hortonsphere is built to withstand pressures of 25 lbs. and over. The large number in use attest its value for preventing evaporation of highly volatile liquids in storage.

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Birmingham	1536 Fiftieth St., N.	Philadelphia	1615 Jefferson Bldg.
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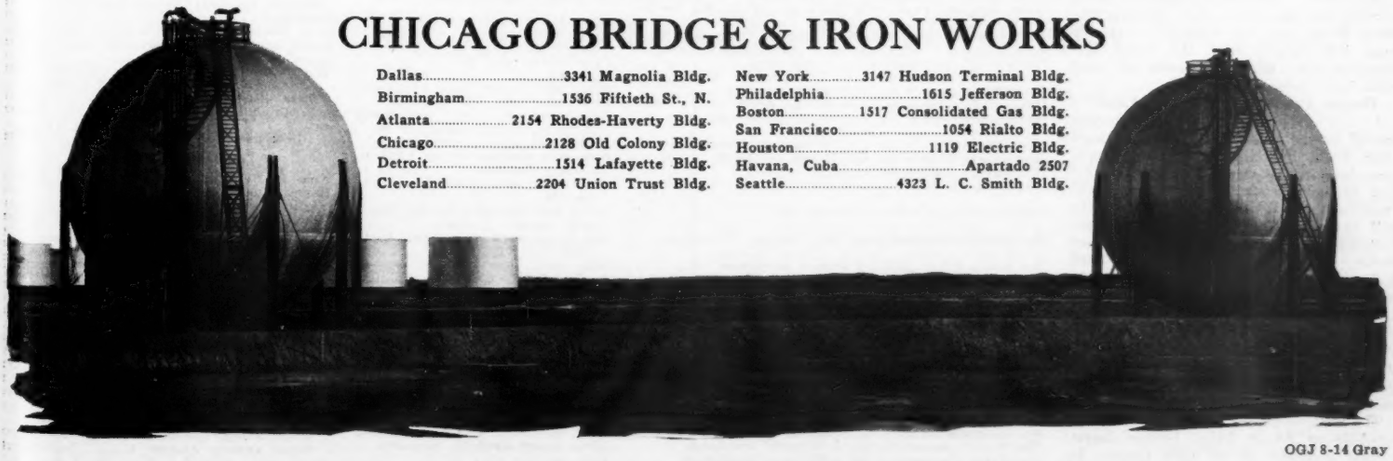
Chicago	2128 Old Colony Bldg.	San Francisco	1054 Rialto Bldg.
Detroit	1514 Lafayette Bldg.	Houston	1119 Electric Bldg.
Cleveland	2204 Union Trust Bldg.	Havana, Cuba	Apartado 2507
		Seattle	4323 L. C. Smith Bldg.



OGJ 8-14 Gray

HORTON PRESSURE STORAGE

Pierce Junction Has 6,200 Barrel Well

Deep Producer at Sweet Lake. Extension of New Port Neches Pool. New Wildcats Started on Moss Bluff Dome

By Neil Williams
Staff Correspondent, Gulf Coast Fields

HOUSTON, Tex., Aug. 11.—Scattered developments in Gulf Coast fields the past week included the completion of a 6,200-bbl. well at Pierce Junction, a deep producer at Sweet Lake, and an extension of the new Port Neches Field in southwestern Orange County. The Pierce Junction gusher, however, came too late in the week to prevent a substantial reduction in the daily average production, which was 4,020 bbls. under what it was the preceding week.

The Pierce Junction well, the best well which has been completed on the Gulf Coast in many months, was Rio Bravo Oil Co.'s No. 19-A Settegast, on the west side of the dome. Although an inside well and opening no new territory, the well has turned considerable attention to that dome, where very little new work has been done for nearly a year. With 93 feet of 4½-inch screen set at 4,226 feet, the well gauged initially at 260 bbls. an hour on a half-inch choke, the flow showing less than half of 1 per cent water. The oil is 35.2 gravity and pressure of the well 800 pounds.

A year ago Pierce Junction was the scene of one of the most active drilling plays witnessed on the Gulf Coast, which resulted in extensions of production the entire distance around the dome, except for a small area on the extreme south side. Since then, with the exception of three or four rigs operating mostly in proven territory, the field has been out of the picture and production has dropped from a peak of above 22,000 bbls. to below 11,000 bbls.

The Rio Bravo well followed the completion earlier in the week of Saxet Oil Co.'s No. 7 Herman, on the southwest side of the dome, which came in flowing 1,000 bbls. daily at 4,496 feet. This oil is 26.6 gravity, and the well had a pressure of 600 pounds.

Rio Bravo Oil Co. has made location and is rigging up for its No. 20-A Settegast, which is 300 feet west of No. 19-A. Other operations at the dome include Gulf Production Co.'s No. 1 Manchester, on the southwest, which is offsetting Saxet's Herman tract, a workover by Rio Bravo Oil Co. in its No. 14-A Settegast, and Navarro Oil Co.'s No. 4 Cain, a workover on the east side of the dome. The latter company until recently has kept two rigs running, the other being on the company's Dooley lease, held jointly with the Texas Exploration Co., where a series of good wells have been completed.

Deeper Production at Sweet Lake

A new deep producing horizon was opened by the Pure Oil Co. at its Sweet Lake Field in Cameron Parish, Louisiana, late in the week with the completion of its No. 9 Yount Lee Oil Co. From a total depth of 6,813 feet, the well came in flowing 433 bbls. in the first 10 hours on a five-sixteenths inch choke. Placed on a three-eighths inch choke the well increased to above 1,350 bbls. daily, a flow it has maintained since. A total of 29½ feet of screen and 81¾ feet of blank were set in the sand. The oil is 28.4 gravity and the temperature 89 degrees. Pressure is 840 pounds on the 2½-inch tubing and 1,550 pounds on the casing.

The well, in addition to being the deepest hole at Sweet Lake, is the fourth deepest producer on the Gulf Coast. As a deep producer it is exceeded only by Yount Lee Oil Co.'s three Houssierre-Latrielle wells, Nos. 6, 7 and 8, on the southeast side of Jennings, which were completed at a 7,400-foot horizon. Previous to No. 9, the deepest hole drilled at Sweet Lake was No. 7, which was abandoned at 6,381 feet. It had been deepened from a sand at 4,594 feet, at which level it had flowed for a short time.

Sweet Lake has been a field of deep production. The discovery well, No. 3, completed in October, 1926, was at a depth of 5,987 feet. At that time it was the deepest producer on the coast, a record which it held up to the past year. That well, after being worked over several times, and deepened to 6,198 feet, has been abandoned. Not including the latest well, five producers have been completed at Sweet Lake, of which only three have flowed for any length of time, and at the time of the completion of No. 9 there was only one producing well.

Sweet Lake is controlled entirely by the Pure Oil Co., with Yount Lee Oil Co. holding the fee ownership. For the past year only one rig has been kept running. As the field is located in the middle of Sweet Lake all tests are water locations.

Port Neches Operations

At Port Neches, southwestern Orange County, The Texas Company brought in its No. 2 Kuhn early in the week, extending the field approximately 500 feet west and making the fifth consecutive producer for The Texas Company. The well, which had an initial production of 30 bbls. of pipe line oil hourly, failed to hold up but a few days and Thursday was dead, probably having sanded. Late in the week, its north offset, No. 2 Stark, also had set screen and was swabbing some oil and water.

These wells are in a different horizon from the other four producers, No. 2 Kuhn being at 4,410 feet and No. 2 Stark at 4,598 feet. Production in the other four wells, located in a group approximately 500 feet east, is from a sandy shale at 3,100-3,200 feet. No. 2 Kuhn and No. 2 Stark failed to find that production but the latter encountered a sand at 4,124-44 feet, which it tested but got salt water. Gulf Production Co.'s No. 1 Starks, 1,500 feet north of The Texas Company's production, is the only other test drilling and late in the week it was below 5,275 feet in sand rock.

Good Humble Producer

At Humble, Rio Bravo Oil Co. added another good producer to the series of wells being completed in the development of the new producing area on the west flank of the dome. This well was No. 3 fee in the Bender south addition to the town of Humble and extends the production on that side another location to the southward. Rio Bravo Oil Co.'s No. 4 fee late in the week also was being brought in. No. 3 is in sandy shale at 4,120 feet and No. 4 at 3,890 feet. This company already has rigged up for No. 5 fee and made location for No. 6. Its No. 1 H. E. and W. T. is drilling at 4,100 feet. In the same area Sun Oil Co. has four tests under way.

Other completions of the week included two small wells at Raccoon Bend, and one each at Barbers Hill, Sour Lake, Clay Creek and Saratoga. Of particular interest at Raccoon Bend is the wildcat location made by Humble Oil & Refining Co., 1½ miles to the south of the field. This will be No. 1 Fitz Lamp in the Thomas Boatright Survey. At Barbers Hill there has been no let-up in development but operations for the most part have been routine drilling for several weeks. A series of tests now are down to the producing horizon and should chalk up several additional completions for that dome within the next week. Of some interest at Barbers Hill is Sun Oil Co.'s No. 1 O. K. Winfree, a wildcat on the extreme west side of the dome, which has drilled through over 800 feet of cap rock and back into formation again. Saturday it was drilling hard sand and lime at 5,147 feet.

New Work

Among the new work starting up on the Gulf Coast are two wildcats on the northwest side of the Moss Bluff Dome. These are Humble Oil & Refining Co.'s No. 1 Orlando Hylton and No. 1 Breeding, both in the B. M. Spink Survey, southern Liberty County. These wildcats are on the opposite side of the dome from this company's No. 6 Sterling and Gulf Production Co.'s No. 1 McFaddin, the two producers which have been completed at Moss Bluff. No. 6 Sterling was the discovery well, being completed January 2. Gulf's No. 1 McFaddin, the north offset to the discovery well, was only recently completed. Neither well is producing now. Gulf is drilling its second test on the east side of the dome, this being No. 2 McFaddin, to the northwest of No. 1. On the south side of the dome, Shell Petroleum Corp. has abandoned its wildcat, No. 1 Herff (Chambers County). This test went to 5,630 feet where drill stem stuck.

The chief development at Refugio in the lower coastal country the past week was the finding of the 6,400-foot sand in Independent Oil & Gas Co.'s No. 6 Jerry Reilly, located in the northeast corner of Lot 2, Block 4. This well is 4,000 feet to the northwest of Mission Drilling Co.'s No. 1 Moss and Independent's No. 1 Shelly, the only two other 6,400-foot wells, and is located on the inside of 3,700-foot field. It formerly was a producer at 3,683 feet but was deepened following the steady development of deep horizons on the east side of the field. It topped the deep horizon at 6,447 feet and is at a total depth of 6,458 feet. Considering the previous trend of the 6,400-foot production northeastward from the field, the sand in this test, which is a substantial distance to the northwest of the deep play, and underlying the 3,700-foot field, is of considerable importance to Refugio development.

Daily Average Production

Daily average production of coastal fields for the week ended August 9 was:

SOUTHEAST TEXAS

Allen	43
Barbers Hill	17,131
Batson	1,053
Big Creek	4,176
Blue Ridge	1,630
Brenham	145
Boling	1,113
Clay Creek	1,495
Damon Mound	680
DeWalt	11,845
Fannett	897
Goose Creek	4,566
Hankamer	2,694
High Island	938
Hull	8,251
Humble	19,032
Jasper County	20
Lost Lake	508
Markham	325
Nash	308
North Dayton	2,805
Orange	2,117
Orchard	1,902
Pierce Junction	11,744
Port Neches	2,380
Raccoon Bend	11,891
Refugio	26,899
Esperson (Sheeks)	2,302
Saratoga	1,140
Sour Lake	2,165
South Liberty	3,662
Spindletop	17,129
West Columbia	5,657
Total Southeast Texas	171,444
Week ending August 2	176,782
Decrease	5,338

SOUTH LOUISIANA

Anse La Butte	32
Bayou Blue	50
Bayou Bouillon	721
Black Bayou	500
Edgerly	429
Jennings	2,120
Hackberry	3,182
Lake Barre	1,346
Lake Pelto	138
Lockport	2,816
Port Barre	4,564
Sorrento	88
Starks	630
Suphur	3,950
Sweet Lake	682
Vinton	6,913
Welsh	130
White Castle	1,230
Total South Louisiana	29,522
Week ending August 9	28,204
Increase	1,318
Total Gulf Coast	200,966
Week ending August 9	204,986
Decrease	4,020

GULF COAST FIELDS AND WILDCATS

Week Ended August 9

BARBERS HILL—CHAMBERS COUNTY

Mills Bennett Production Co.'s No. 10 Barrow, southwest	Oil sand 4,821 ft.; cem. casing.
Mills Bennett Production Co.'s No. 3 E. W. Barber, north	Drlg. sandy shale 3,308 ft.
Mills Bennett Prod. Co.'s No. 1 Henry Fisher, southwest	Drlg. shale and lime 4,448 ft.
Mills Bennett Prod. Co.'s No. 4 Gulf-Higgins, southeast	Drlg. sandy shale 3,914 ft.
Humble Oil & Ref. Co.'s No. 6 fee, west	Drlg. shale 4,583 ft.
Humble Oil & Ref. Co.'s No. 7 Meyers fee, west	Standing.
Humphreys Corp.'s No. 1 Fitzgerald, north	Drlg. hard sandy lime 1,765 ft.
Humphreys Corp.'s No. 1-B Barber, north	Drlg. sand and lime 1,875 ft.
Humphreys Corp.'s No. 9-A Kirby, northwest	Drlg. hard shale and lime 3,806 ft.; cem. 10-in. casing.
Humphreys Corp.'s No. 6-A Barber, northwest	Drlg. hard sandy lime 3,458 ft.
Humphreys Corp.'s No. 8-B Kirby, northwest	Cemented surface casing 1,378 ft.
Humphreys Corp.'s No. 2 Scott	To pump 7,296 ft.
Humphreys Corp.'s No. 2-H Kirby (workover)	Shale 6,607 ft.; trying to get to bottom.
McAlbert Oil Co.'s No. 7 Woodward	Set 1 joint screen 5,426 ft.; tested salt water.
Republic Production Co.'s No. 3 Kirby (workover)	Rig up to work over; total depth 5,335 ft.
Rio Bravo Oil Co.'s No. 1 Fisher, southwest	Drlg. hard lime 3,798 ft.
Sinclair Oil & Gas Co.'s No. 3 McKinney fee	Total depth 6,597 ft.; pulling liner 5,072 ft.
Sinclair Oil & Gas Co.'s No. 5 McKinney fee, southeast	Drlg. hard shale and lime 4,879 ft.
Sun Oil Co.'s No. 1 Wilburn fee, southeast	Set 5 joints screen 5,215 ft.; flowing 435 bbls.
Sun Oil Co.'s No. 8 Wilburn fee, southeast	Drlg. sandy shale 5,183 ft.
Sun Oil Co.'s No. 8 J. Wilburn, southeast	Drlg. shale 5,178 ft.
Sun Oil Co.'s No. 9 J. Wilburn, southeast	Pulling screen 4,719 ft.
Sun Oil Co.'s No. 6 Chambers, south	Drlg. hard shale and lime 3,930 ft.
Sun Oil Co.'s No. 1 Zadie Fisher, southwest	Rig.
Sun Oil Co.'s No. 1 O. K. Winfree, west	Drlg. hard sand and lime 5,147 ft.
The Texas Company's No. 4 Wilburn, southeast	Total depth 5,149 ft.; to pump.
The Texas Company's No. 1 Williams, southwest	Drlg. surface clay 262 ft.
Yount Lee Oil Co.'s No. 1 Hindman, southwest	Drlg. sand and boulders 2,415 ft.
Yount Lee Oil Co.'s No. 15 Chambers, south	Drlg. hard sand and lime 1,920 ft.
Yount Lee Oil Co.'s No. 4 Phillips, southeast	Set screen 5,285 ft.
Yount Lee Oil Co.'s No. 8 Woodward, southeast	Drlg. shale and lime 4,938 ft.

(Continued on Page 125)

First Commercial Well in Lower Trinity

Feature of North Louisiana Completions. Richland Parish Gas Field Extended. Two More Mississippi Gassers

By D. H. Bancroft
Staff Correspondent, Louisiana-Arkansas

SHREVEPORT, La., Aug. 11.—Completion of R. W. Norton's No. 1 Hill, NW NE Section 33-23-16, northwest Caddo Parish, as an 11,242,000-foot gasser with a spray of very light oil, practically pure gasoline, at total depth of 5,506 feet with 16 feet of lime streaked with hard sand, being North Louisiana's first commercial well in the lower Trinity, and an extension half a mile southwest of the Richland Parish gas field by Palmer Corp.'s No. 1 Seubert, NW SE Section 1-16-5e, were the outstanding developments of the past week in the Shreveport territory.

The territory was comparatively quiet following several weeks of important development, including opening of a new potential oil field in Miller County, Arkansa; completion of three large wells in the East Zwolle Field and opening of a potential oil area in Bienville Parish.

Lenz and others' No. 1 Johnson in Section 24-15-26, Miller County, Arkansas, remained status quo during the week and probably will be standardized as it has not yet been bailed back in as a flowing well. During the past week only one major company has entered the territory since the well showed for a 15 to 50-bbl. producer at a depth of 2,847 feet. Magnolia Petroleum Co. acquired a tract of 359 acres in Township 16, Range 26, for a consideration of $21.50 per acre, starting about 2 miles southwest of the Johnson well.

Norton's Hill well first gauged 8,492,000 feet of gas, the gas testing 819 gallons per million feet, but later the well's yield had increased to 11,242,000 feet. No rock pressure was taken. The Palmer Corp.'s No. 1 Seubert gauged 53,000,000 feet at 2,450 feet with 850 pounds rock pressure.

Arkansas Fuel Oil Co.'s Lewis & Co. No. 1, Section 26-20-4w, Lincoln Parish, Louisiana, approximately 10 miles northeast of the recently opened Sugar Creek upper Trinity gas field, tested 8 joints of fresh water with a show of oil and gas through drill stem from 4,234-74 feet and arrangements are being made to set 6⅝-inch casing.

Cartersville Producer

Arkansas Fuel Oil Co. added another producer in the Cartersville area of Bossier Parish when No. 2 Bain, Section 31-23-11, was completed at depth of 3,163 feet with 9 feet of sand flowing 383 bbls. of oil daily. Gulf Refining Co. drilling its first Cartersville test in No. 1 Allums and others, Section 36-23-12; junked hole at a depth of 3,203 feet.

In the Wistar district of the same parish, Woodley Petroleum Co.'s No. 2 Schuler, Section 13-17-12, was completed as a 4,500,000-foot gasser.

The recently revived Mooringsport Field in Caddo Parish yielded another producer in Gulf Refining Co.'s No. 1 Leonard fee, Section 27-20-15, which is flowing 50 bbls. through 2-inch tubing at a depth of 2,353 feet.

O. W. Clark's No. 1-B Russell, in Section 25-10-1e, Urania district, La Salle Parish, was a 30-bbl. pumper at a depth of 1,550 feet with 6 feet of sand.

J. S. Harkness' No. 12 Bowles in Section 18-20-5e, Morehouse Parish, Monroe district, originally intended for a 4,500-foot test, has been abandoned after testing salt water at 3,598 feet. Louisiana Gas & Fuel Co. obtained a 1,000,000-foot gasser in No. 3 Breard, Section 44-17-4e, Ouachita Parish, at 2,200 feet. Rock pressure is 925 pounds.

Besides the extension in the Richland gas field, two gassers in proven territory were completed in that area. Louisiana Gas & Fuel Co.'s No. 1-C McCoy, Section 8-16-6e, gauged 24,000,000 feet with 590 pounds rock pressure at 2,450 feet, and United Carbon Co.'s No. 1 R. B. McGowan is making 5,000,000 feet at the same depth.

In the Pleasant Hill district of Sabine Parish, Bridges-Clark Oil Co.'s No. 2 J. W. Guy and others, recently standardized, was gauged as a 12-bbl. pumper at 3,194 feet.

Two chalk rock tests in Zwolle were both failures. Lide and others' No. 3 Sabine Lumber Co. in Section 31-8-12, in the Zwolle townsite, was abandoned as a dry hole at 2,545 feet, and Wilder and others' No. 1 Parrott in the same section was dry at 2,610 feet.

In the Union Parish portion of Monroe Nemours Corp.'s No. 1 Digby was a 4,000,000-foot gasser at 2,120 feet.

Andrews & Davlin, drilling No. 1 Nattin, a wildcat in Section 15-22-14, Bossier Parish, have shut down after testing dry in 6 feet of sand at 1,485 feet.

Triangle Drilling Co. and Ruston Drilling Co. have bought an undivided half-interest from Nicholls and others in the latter's No. 1 McDermott and the 5,000 acres surrounding it for a consideration of $15,000. The new owners plan to complete the test in Section 28-18-6w, Bienville Parish, a wildcat which tested one fourble of mud and 10 feet of oil through drill stem at 2,358 feet. The trade calls for payment of $5,000 in cash to Nicholls and others and the retirement of outstanding obligations out of the remainder of the payment price. There are also certain provisions as to the buying of additional acreage.

Arkansas Fuel Oil Co. has spudded in another test in the Bisteneau gas field of Bienville Parish. The new test is No. 1 Graves, Section 22-16-10, which after setting surface casing at 106 feet is now drilling at 1,506 feet. Triangle Drilling Co. has spudded in No. 1 Bolinger, Section 36-23-13, a Bossier Parish wildcat, which is drilling at 860 feet.

Nick Barbare and others are drilling ahead in No. 1 McGraw, Section 30-10-9e, Catahoula Parish, east central Louisiana, after testing salt water and a show of gas at 1,152 feet. W. M. Coats and others' No. 1 Collins, Section 28-9-10, Natchitoches Parish, 12 miles east of Zwolle, tested dry through drill stem from 2,186-2,270 feet and is now shut down for water.

In Red River Parish E. C. Lucas is preparing to set 6-inch casing at 2,440 feet with total depth of 2,460 feet where 14 feet of sand was encountered in No. 1 Louisiana Delta Pecan Co., Section 34-13-11.

After shooting formation and getting neither a show of oil gas or water in the 4,100-4,200-foot zone, Cosden Oil Co. is preparing to abandon No. 1 Missouri Pacific Railroad, a deep wildcat in Section 13-9-19w, Pope County, Arkansas.

MISSISSIPPI

The Jackson gas field of Hinds County, Mississippi, added two more gassers during the week bringing the total in that area which includes Hinds and Rankin Counties to 11. Cane River Oil & Gas Co.'s No. 1 Lufkin, Section 15-5-1e, is making 16,500,000 feet of gas from Midway chalk at 2,467 feet while Love Petroleum Co.'s No. 2 Mendoza is making an estimated gas yield of 35,000,000 feet from a depth of 2,442 feet.

Daily average production of the various pools in this area during the past week follows:

NORTH LOUISIANA	
Caddo, light	9,505
Caddo, heavy	2,570
Homer	3,525
Haynesville	4,795
De Soto-Red River	3,075
Elm Grove	450
Bellevue	680
Cotton Valley	1,990
Urania	5,225
Pleasant Hill	570
Sarepta-Carterville	3,780
Zwolle	5,385
Holly	1,095
Total	42,645
Last week	41,650
Increase	995
ARKANSAS	
El Dorado	4,220
Smackover, light	5,100
Smackover, heavy	37,300
Stephens	925
Nevada County	1,010
Lisbon	950
Champagnolle	4,750
Bradley	65
Mount Holly	100
Urbana	1,075
Total	55,495
Last week	55,040
Increase	455
Both States	98,140
Last week	96,690
Increase	1,450

WILDCAT OPERATIONS IN LOUISIANA-ARKANSAS

NORTH LOUISIANA

AVOYELLES PARISH

Company, farm and location—	Remarks—
R. E. Tippett's No. 1 Chateline, NE NE, Sec. 34-1n-3e	Cored S.W. sand 3,146-47 ft.; drlg S.W. sand 3,400 ft.; S.D. 3,410 ft

BIENVILLE PARISH

Ark.-La. P. L. Co.'s No. 1 Graves, 660 ft. S, 878 ft. W, NE cor. NW, Sec. 22-16-10	Began drlg. July 31; 10-in. 16' ft; T.D. 1,506 ft.
W. A. Nichols et al's No. 1 McDermott, 660 ft. S, 660 ft. W, NE cor. NE NE, Sec. 28-18-6	D.S. test 2,281-2,358 ft.; 1 fourble mud; 10 ft. oil; S.D. for csg.

BOSSIER PARISH

Andrews & Daveline's No. 1 Nattin, 100 ft. N, 250 ft. W, C, Sec. 15-22-14	Claim 6-ft. saturated sand (oil) 1,476-82 ft; D.S. test 1,485 ft.
Autrey Oil Co.'s No. 1 Johnson, 1,120 ft. N, 200 ft. E, SW cor. NW, Sec. 34-19-11	Began drlg. July 25; S.D. for fuel 60 ft.
Autrey Oil Co.'s No. 1 McDade, 200 ft. S, 200 ft. E, C, Sec. 28-19-11	Derrick.
Triangle Drlg. Co.'s No. 1 Bollinger, C SE SE, Sec. 36-23-13	Drlg. 860 ft.

CADDO PARISH

Falcon Oil Co.'s No. 1 Oden, NE cor. SE NE, Sec. 19-19-14	Fishing for D.S. 2,475 ft.
L. B. Mawk's No. 1 Swann, 440 ft. N, 200 ft. E, SW cor., Sec. 23-21-14	S.D. for fuel; T.D. 700 ft.

CATAHOULA PARISH

Nick Barbee et al's No. 1 L. McGraw, 150 ft. N, 150 ft. W, SE cor. SW NW, Sec. 30-10-9	Tested S.W; small S.G. at 1,15[illegible] ft; drlg. 1,250 ft.
National O. & G. Co.'s No. 1 Kirkland, 585 ft. E, 495 ft. N, SW cor., Sec. 35-9-1n	Drlg. 2,800 ft.

CLAIBORNE PARISH

El Dorado Chief Oil Co.'s No. 1 Dance, C SW NE, Sec. 27-20-7	S. D. 2,240 ft.
La. G. & F. Co.'s No. 1 Tensas Delta Land Co., 660 ft. N, 1,318 ft. E, SW cor., Sec. 23-6-5	Location.
Leue Oil Co.'s No. 1 Taylor, 1,153 ft. S, 360 ft. W, C, Sec. 16-22-6	T.A. 3,004 ft.
Triangle Drlg. Co.'s No. 1 Hodges et al, 660 ft. S, 660 ft. E, NW cor. NW SW, Sec. 6-19-5	Drlg. 1,400 ft.

(Continued on Page 121)

LOUISIANA-ARKANSAS PROVEN AREAS

NORTH LOUISIANA

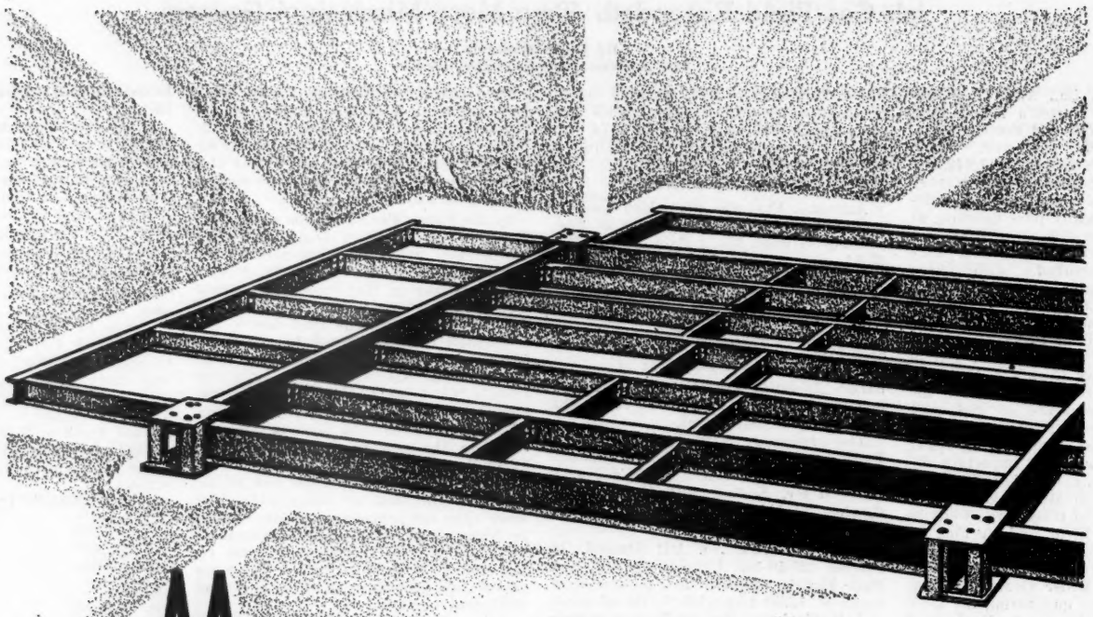
BOSSIER PARISH—CARTERVILLE

Company, farm and location—	Remarks—
Ark. Fuel Oil Co.'s (formerly Muslow Oil Co.'s) No. 1 Floyd, 990 ft. S, 330 ft. W, C, Sec. 25-23-12	W.O.S.R. 3,176 ft.
Del.-La. Dev. Co.'s No. 6 Bollinger, 330 ft. S, 220 ft. W, NW cor., Lot 17, in Lot 16, Sec. 31-23-11	Full oil; W.O.S.R.; 15 ft. broken sand; T.D. 3,217 ft.
Greenwood Prod. Co.'s No. 2 Bollinger, 990 ft. W, 330 ft. S, NE cor. NE SE, Sec. 36-23-12	Cmtd. 6⅝-in. 3,138 ft.; 5 ft. sand; W.O.S.R. 3,173 ft.
Magnolia Pet. Co.'s No. 2 Matlock, 330 ft. S and W. NE cor. SE SW, Sec. 25-23-12	W.O.S.R. 3,188 ft.
Magnolia Pet. Co.'s No. 3 Matlock, 330 ft. N, 330 ft. W, SE cor. SE SW, Sec. 25-23-12	Cmtd. 8¼-in. 3,132 ft; T.D. 3,179 ft.; arranging to deepen.
Magnolia Pet. Co.'s No. 2 Roberson, 330 ft. S, 330 ft. E, NW cor. SW NE, Sec. 26-23-12	D. S. test 3,132 ft.; 5 joints oil and gas show; plugged back to 2,900 ft; arranging to shoot 2,940-50 ft.
Nat. Drlg. & Prod. Co.'s (was Lide et al's) No. 1 Matlock, 2,970 ft. S, 990 ft. E, NW cor., Sec. 26-23-12	Hole full S.W; T.A. 3,181 ft.
Palmer Corp.'s No. 2 Roberson, 330 ft. N, 330 ft. E, SW cor. NW NE, Sec. 26-23-12	Derrick.
The Texas Co.'s No. 1 Pine Woods Lbr. Co., 1,650 ft. S, 300 ft. E, NW cor., Sec. 25-23-12	Set 10-in. 200 ft.
The Texas Co.'s No. 2 Hy Rose, 965 ft. E, 425 ft. N, C, Sec. 31-23-11	O.W.D.D.; began drlg. July 22; drlg. shale 3,147 ft.; old T.D. 3,075 ft; cmtd. 4½-in. 3,148 ft; T.D. 3,174 ft.
The Texas Co.'s No. 15 Wilkinson, 990 ft. S, 330 ft. W, NE cor., Sec. 36-23-12	Began drlg. Aug. 3; 10-in. 340 ft; drlg. chalk rock 1,700 ft.
Tippett Drlg. Co.'s No. 3 Holmes, 330 ft. N, 330 ft. E, SW cor. NE NW, Sec. 36-23-12	300 ft. oil in hole; waiting on power; T.D. 3,180 ft.
Woodley et al's No. 1 Roberson, 330 ft. N, 330 ft. W, SE cor. SW NE, Sec. 22-23-12	Surface csg. collapsed; W.O.; T.D. 1,500 ft.

BOSSIER PARISH—SLIGO

La. Gas & Fuel Co.'s No. 4 Skannal, 3,300 ft. E, 660 ft. S, NW cor., Sec. 13-17-12	Derrick.

(Continued on Page 122)



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Wyoming Watching Midway Dome Test

Outcome Eagerly Awaited, as Another Light Oil Field Close to Casper Refineries Would Insure Ample Crude Supply

By Tolbert R. Ingram
Staff Correspondent, Rocky Mountain Area

DENVER, Colo., Aug. 11. — Interest among oil men in Wyoming centers on the Midwest Refining Co.'s No. 11 Middy, which shows prospects of opening up another light oil pool. The well is standing cemented, and it is planned to drill it in late this week.

The Midwest Refining Co.'s No. 33 Byers, in the Hobbs Pool in Lea County, New Mexico, is estimated good for 10,000 bbls. and extends the area of the big producers farther to the southeast. The Sun Oil Co. has a 350-bbl. well in its No. 1 McKinley and the Texas Production Co. has a small well in its No. 1 Selman, the most southerly well in the field. Only one new Hobbs location was announced this week. The largest flow of gas so far found in the Hobbs area was encountered in the Humble Oil & Refining Co.'s No. 4 Bowers which gauged 80,000,000 feet. Another test is to be drilled in the Caprock district in Lea County 3½ miles west of the discovery made by the Vacuum Oil Co. two years ago.

A small show of oil and gas in Archuleta County attracted attention to a new area in Colorado. The Murchison Oil Co. is spudding in a Pennsylvanian test in La Plata County and a Dakota sand test is being started northwest of Fort Lupton in Adams County by the Eastman Oil Co. The Midwest Refining Co. is abandoning its Buffalo Creek wildcat in Jackson County.

The Salt Creek deep test in Wyoming is in the top of the Deadwood formation and the Producers & Refiners Corp. has a well on the Big Sand Draw Dome in Fremont County which gives promise of proving sands below the gas sands in the Frontier for the first time.

NEW MEXICO

Hobbs Area—Lea County

Three wells are being completed in the Hobbs Pool this week, the largest being the Midwest Refining Co.'s No. 33 Byers, SE SW NE, Section 4-19-38, which is estimated at 10,000 bbls. a day. The others are the Sun Oil Co.'s No. 1 McKinley, C NE NE, Section 5-19-38, which is estimated at 350 bbls., and the Texas Production Co.'s No. 1 Selman, NW cor. SE, Section 15-19-38, which will make a small producer. The Midwest's No. 1 Byers extends the area for the big wells about 1½ miles to the southeast, though it does not mean any extension of the limits of the pool. It is about half way between the group of wells in the southeastern part of the field where the production has not been so large and the area of the 10,000 to 20,000-bbl. wells. The company's well, however, does add a little new territory on the southwestern side and the Texas Production Co.'s No. 1 Selman is one-fourth of a mile south of the nearest producer and on the extreme southeastern end of the pool.

Only one new location was made in the Hobbs Pool the last week, this being the California Co.'s No. 4 State, SW cor. SE, Section 29-18-38, an offset on the east to the Continental Oil Co.'s No. 2-A State and a diagonal offset on the northeast to the Gypsy Oil Co.'s No. 4 Grimes. Present indications are that four or five more wells will be spotted and then a lull in the starting of new operations may be expected. The large number of new locations made during the last three weeks followed the reaching of an agreement among the operators for the prorating of production and the limiting of wells to one to each 40 acres, the companies hastening to come in under the agreement as soon as a definite decision was reached.

Several wells drilling near the pay were delayed on account of casing and other difficulties. One well made a record for volume of gas in the field. This was the Humble Oil & Refining Co.'s No. 4 Bowers, SE cor., Section 30-18-38, which gauged 85,000,000 feet in 24 hours from lime at 3,691-93 feet. The gas is being killed to continue drilling to the big pay at around 4,100 feet. This well is located three-eighths of a mile due south of the Humble's No. 1 Bowers, the discovery well in the northwestern part of the field. A large volume of gas also was encountered in the Ohio Oil Co.'s No. 2 State-Northrup, C SE SE, Section 32-18-38, a joint operation with the Independent Oil & Gas Co. The gas was found at 3,694-3,700 feet and was estimated at 50,000,000 feet. Drilling is in progress at 3,900 feet. The Continental, Sun and Midwest companies are drilling offsets to this well. In this part of the field the wells are being spotted 660 feet back from the lease lines as against 330 feet in other areas.

Fisher & Lowrie's No. 1 State, NE cor. NW, Section 11-18-36, 7 miles to the west of the nearest producer in the Hobbs Pool, which apparently is on a separate high but indicative of the possibilities in that direction, is listed as a completion. It was drilled to 5,506 feet and plugged back to 5,171 feet and shot with 200 quarts. The pay was at 5,142-54 feet and the production the first 24 hours was 50 bbls. The elevation is 3,804 feet. The top of the salt was at 2,063 feet, the base at 3,080 feet and top of the brown lime at 3,465 feet. The Honolulu Consolidated Oil Co. and the Penn Oil Co. have interests in the well. The oil tested 37 gravity and contained practically no sulphur.

Routine Operations

Routine operations in the Hobbs area include the following:

The Amerada Petroleum Corp.'s No. 1-A State, SW NW NE, Section 32-18-38, is drilling out plug after cementing the 7-inch at 3,938 feet. Its No. 2-A State, NE cor., Section 32-18-38, cemented the 12½-inch in the red beds at 224 feet. It spudded on July 24. The Amerada's No. 1-B State, SW SE NW, Section 29-18-38, is drilling at 1,490 feet in anhydrite. The elevation is 3,650 feet and the top of the anhydrite was at 1,460 feet. The same firm's No. 2-B State, SE SW NE, Section 29-18-38, is bottomed at 222 feet and rigging up rotary, and its No. 3 McKinley, SW NW NW, Section 30-18-38, had some gas at 2,814 feet, gas and oil at 3,195 feet, and is drilling at 3,195 feet in anhydrite.

The Atlantic Oil Producing Co.'s No. 1 State, NE cor., Section 6-19-38, is bottomed at 2,813 feet in anhydrite and is running the 9⅝-inch liner. It bottomed the salt at 2,560 feet and topped the brown lime at 2,810 feet. The elevation is 3,633 feet.

The California Co.'s No. 1 State, NW SE SE, Section 29-18-38, is coring in lime at 3,994 feet. This well is an offset on the south to the Tidal Oil Co.'s No. 1 Grimes, the largest producer so far completed in the field. The California Co.'s No. 2 State, NE SW SE, Section 29-18-38, is drilling at 2,715 feet in anhydrite, and its No. 3 State, SE cor., Section 29-18-38, has cellar completed.

The Continental Oil Co.'s No. 1-A State, SE NW SE, Section 29-18-38, is drilling at 2,600 feet. It bottomed the salt at 2,490 feet. Same company's No. 2-A State, SE cor. SW, Section 29-18-38, cemented the 12½-inch at 217 feet. It spudded on July 26. Continental's No. 3-A State, NE NW SE, Section 29-18-38, is rigging up rotary, and its No. 1-B State, C SW SW, Section 33-18-38, cemented the 9⅝-inch at 2,738 feet. Same company's No. 2-B State, NW cor. SW, Section 33-18-38, is drilling at 1,150 feet in red rock, and its No. 3-B State, CNL SW, Section 33-18-38, is rigging up rotary.

The Empire Gas & Fuel Co.'s No. 1 Hardin, SE cor. NW, Section 19-18-38, is rigging up rotary, and its No. 2 Hardin, SW cor. NW, Section 19-18-38, is building rig. Same company's No. 2 Fowler, NW cor. NE, Section 31-18-38, is drilling at 1,310 feet in the red beds. It spudded on July 25.

Shows of Oil and Gas

George F. Getty, Inc.'s No. 4 McKinley, NW cor. NE, Section 30-18-38, is drilling at 3,295 feet in anhydrite. It topped the brown lime at 2,800 feet and had the first gas at 2,805 feet. There was an increase in the oil and gas at 3,190-3,200 feet. Its elevation is 3,657 feet. This well is half a mile to the north and same distance to the east of the nearest producers. Same firm's No. 5 McKinley, NE cor., Section 30, is still a location.

The Gypsy Oil Co.'s No. 2 Grimes, NE SE NW, Section 32-18-38, is drilling at 3,840 feet, and its No. 3 Grimes, NE cor. SW, Section 32-18-38, is drilling at 3,240 feet and had a show of oil at 3,140 feet. Same company's No. 4 Grimes, NE cor. NW, Section 32-18-38, is bottomed at 2,741 feet and preparing to run the 9⅝-inch, and its No. 5 Grimes, SW cor., Section 32, is drilling at 2,630 feet. Its No. 1 Graham, SE cor. NE, Section 24-18-37, is rigging up rotary.

Hobbs High, Inc.'s No. 1 Tatum, NW SW SW, Section 35-18-38, to the east of production, is drilling at 3,650 feet in lime. It had 400 feet of salt water at 3,360 feet.

The Humble Oil & Refining Co.'s No. 2-A Bowers, NW cor. SE, Section 30-18-38, is standing at 3,960 feet with the 6⅝-inch cemented, and its No. 3 Bowers, SW cor., Section 29-18-38, is drilling at 3,797 feet in anhydrite and lime. Same company's No. 5 Bowers, NW NE SE, Section 30-18-38, is drilling at 3,489 feet, and its No. 8 Bowers, SW cor. SE, Section 30-18-38, is drilling at 1,522 feet in anhydrite. The top of the anhydrite was at 1,471 feet. The Humble's No. 9 Bowers, SE SW NW, Section 29-18-38, is drilling at 1,446 feet in red shale, and its No. 10 Bowers, NE NW SW, Section 29-18-38, is drilling at 102 feet in red rock. It spudded July 28.

The Landreth Production Co.'s No. 1 State, SW cor. SE, Section 7-18-38, north of production is drilling at 4,287 feet in lime and anhydrite and is making 1½ bailers of salt water per hour from 4,130-35 feet. It had a small show of gas at 4,287 feet. Same company's No. 1-B State, SW cor. NW, Section 33-18-38, is bottomed at 3,460 feet in anhydrite and lime and is killing gas. It had oil and gas at 3,260-65 feet. Landreth's No. 2-B State, CSL NW, Section 33-18-38, cemented the 12½-inch at 209 feet in red rock.

Midwest Wells

The Midwest Refining Co.'s No. 8 State, C NW NW, Section 10-19-38, is drilling at 3,740 feet in lime and had a show of gas at 3,705 feet. Its No. 8 State, C NW NW, Section 4-19-38, is drilling at 3,800 feet in lime and had gas at 3,698 feet. Same company's No. 33

(Continued on Page 109)

NEW WELL IN RED COULEE RAISES FIELD'S OUTPUT TO 1,400 BBLS.

By Victor Lauriston
Staff Correspondent, Canadian Fields

CHATHAM, Ontario, Aug. 11.—On the international Red Coulee structure, Cosmos Petroleum Co.'s No. 2 Thacker, NW SE, Section 2-37-4w, on the Montana end, has been brought into production at 2,560 feet with around 200 bbls. a day. This is the thirteenth producer in the Red Coulee Field. No. 2 is just west of Cosmos' No. 1 and production is of slightly higher grade. The production of the entire field is now estimated around 1,400 bbls. a day.

On the Montana end of the structure, Monalta Oil Co.'s No. 1 Buckley, Section 1-37-4w, is reported producing steadily. Monalta's No. 2 is at 2,515 feet and rigging up to run 5¼-inch casing. Its No. 3 is cored down to 2,521 feet, about 5 feet in the sand, and looks like a good commercial well.

Mid-Continent Oil & Refining Co.'s No. 1 at 2,495 feet is reported making 100 bbls. a day, after deepening. Its No. 2 is at 2,505 feet and after completing water shut off is making around 110 bbls. Cosmos' No. 1 Thacker, Section 2-37-4w, is taking settled production around 165 bbls. at 2,558 feet. Hannah Porter Oil Co.'s No. 1 at 2,550 feet is making 240 bbls. settled production, and is the best well in the field.

Hannah Porter's No. 2 is drilling below 400 feet. Alberta Pacific Consolidated's No. 2 Buckley is drilling below 1,900 feet. Rice & Radigan's No. 1 has a settled production of 95 bbls. at 2,550 feet, and No. 2 is drilling around 1,900 to 2,000 feet. Inland Petroleum's No. 1, which came into production recently, is reported making 80 bbls. at 2,540 feet. Ohio Oil Co.'s No. 1, SW Section 2-37-4w, at 2,555 feet shows settled production of 40 bbls.; Ohio's No. 2 Farbo is drilling at 2,517 feet and No. 3 is rigging up.

Huso Brothers' No. 1 is standing cemented at 2,510 feet. Nellie-Jane's No. 1 Farbo is reported at 250 feet and waiting for casing. Askalta Oils' No. 1, offsetting Hannah Porter's No. 1, is drilling at 250 feet. Omega Oil & Gas Co.'s No. 1, Section 12-37-4w, is at 300 feet and drilling. Adanac Oil & Gas Co.'s No. 1, NE Section 12-37-4w, offsetting Monalta's No. 1 producer, is drilling below 2,400 feet.

On the Alberta end of the Red Coulee structure, Ko-Top Oils' No. 1-A, LSD 1, Section 2-1-17w4, is at 259 feet and working on casing. McLaughlin Oils' No. 1, LSD 5, Section 10-1-17w4, is preparing for a test. Capitol Oil & Gas Co.'s No. 1, LSD 3, Section 21-1-16w4, is deepening below 2,753 feet. Celtic Oils' No. 1, LSD 4, Section 17-1-16w4, is reported drilling at 1,708 feet.

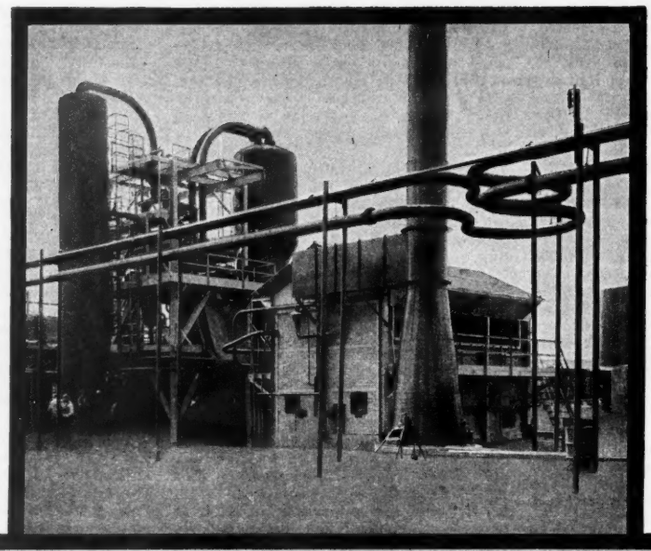
Apex Oils, Ltd. of Vancouver, British Columbia, is reported arranging a merger with Western Range Oils, Ltd. of Calgary to be followed by a joint test of acreage in the Red Coulee Field.

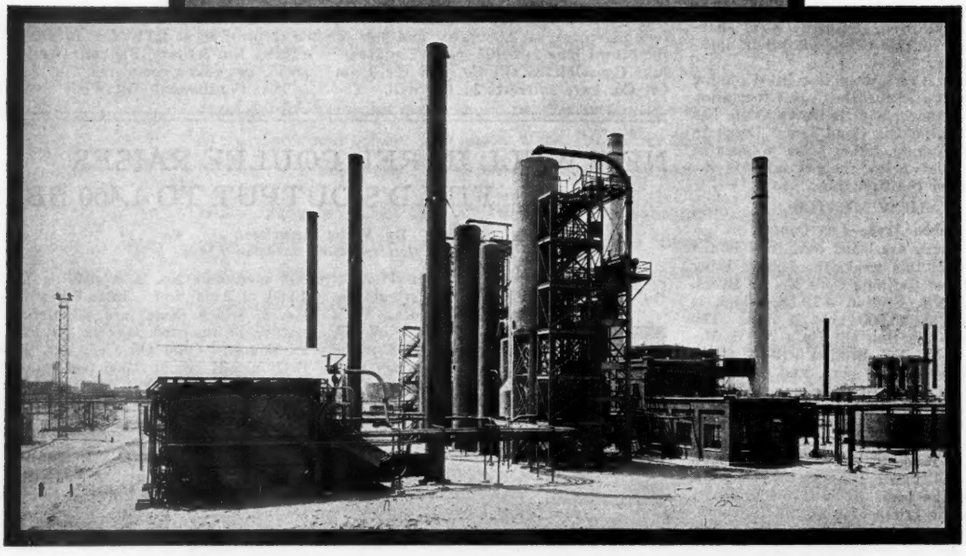
Imperial Operations

In the Turner Valley Field, Royalite Oil Co.'s No. 18 deep lime producer in the central area has been cleaned out and restored to normal production, around

(Continued on Page 130)

PROGRESS





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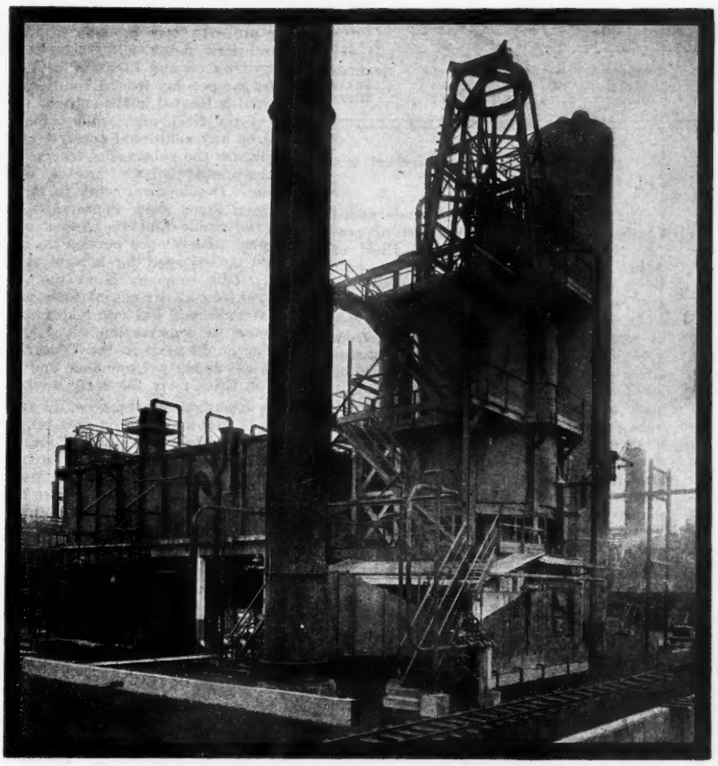

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Pennzoil Company
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Gulf Refining Co.
Tidal Refining Co.
Continental Oil Co.
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Will Continue Calfiornia Curtailment

Operators Realize Output Must Be Held to Requirements. New Deeper Sand Discovered at Potrero

By L. P. Stockman
Staff Correspondent, California Fields

LOS ANGELES, Calif., Aug. 9.—Although California's present curtailment program expires November 1, 1930, it is a foregone conclusion that this period will be extended several months and, in all probability, a year beyond that date. The mere fact that there has not been any diminishing of the state's potential production precludes any possibility that crude oil curtailment may be discontinued at the expiration of the present period next November. California's potential daily production approximates 1,136,000 bbls. at the present time. This figure has remained relatively stable during the past 90 days and there is nothing to indicate that any substantial reduction may be anticipated between now and November 1. It is quite obvious, therefore, in view of this condition that curtailment work must be extended on into the future for an indeterminate period, as it would be a physical impossibility to cope with a current production anywhere near this figure. The advent of the winter season with its lessened demand for petroleum products also renders the termination of curtailment work impossible in November because this is at a time when the demand for crude oil is at its lowest ebb.

It was the general consensus of opinion at a meeting held this week by the operators general committee on curtailment that artificial regulation of production must be continued in California for another year. This assumption was predicated on the fact that curtailment work could not be discontinued on November 1 in the face of a lessened demand, together with the fact that the industry was facing a very serious situation next summer due to the expiration of the Kettleman Hills agreement in July, 1931. Kettleman Hills will become the dominating factor in crude oil production next year unless operators get together in the meantime and formulate some method of keeping field production down to a minimum. Whether this will be done by unit operation or regulation of development work, only the future can tell. The fact remains, however, that a restriction of some kind must be enforced at Kettleman Hills because it would be impossible both physically and economically to cope with unrestricted development work in that area. The enormous potentiality of Kettleman Hills makes it practically obligatory for operators in all fields to continue aggressive curtailment work for more than a year.

There has been some misconception during the past month or so as to what constitutes California's allowable daily production and, in order to clarify the situation, the operators general committee on state-wide curtailment has called attention to the fact that this is a pegged figure set at 596,000 bbls. per day irrespective of the state's potential production. At a meeting held in Los Angeles during the past week, the operators general committee on curtailment reaffirmed the original resolution formulated on May 15, 1930, which established this figure as the basis of curtailment. The resolution of May 15, submitted at that time by a subcommittee composed of W. C. McDuffie, H. R. Macmillan and Paul Getty, recognized the basis of curtailment as being a definite pegged allowable daily production of 596,000 bbls. per day. This allowable was predicated on the findings of a special committee of 11 which undertook and completed a rather comprehensive general survey covering production and consumption figures for the State as a whole. Chairman Paul N. Boggs, in explaining his interpretation of the resolution in question, called attention to the fact that the principle of state-wide curtailment was predicated on complete cooperation among all operators throughout the State.

TANKER SHIPMENTS FROM LOS ANGELES TO ATLANTIC AND GULF COAST PORTS

Commodity	Total this week	Daily average	Total last week	Daily average	This year to date	Same time last year
Crude oil	.....	.....	.....	.....	68,650	879,835
Fuel oil	.....	.....	.....	.....	71,950	49,950
Diesel and gas oil	.....	.....	141,873	20,268	2,294,195	988,950
Gasoline	417,653	59,665	384,679	54,954	11,784,649	12,120,543
Naphtha distillate	.....	.....	.....	.....	.....	81,750
Coastwise—						
Crude oil	434,526	62,075	83,000	11,857	9,087,080	14,418,981
Fuel oil	358,937	51,277	373,022	53,289	10,206,050	12,492,312
Diesel and gas oil	67,336	9,620	22,197	3,171	1,138,088	761,902
Gasoline	368,155	52,594	397,997	56,857	7,455,371	6,505,316
Kerosene	.....	.....	12,081	1,726	114,685	38,582
Exports—						
Crude oil	51,315	7,331	219,141	31,306	3,951,765	3,240,380
Fuel oil	265,976	37,997	192,965	27,566	10,901,890	11,158,440
Diesel and gas oil	73,666	10,524	105,895	15,128	2,797,092	1,480,206
Gasoline	355,968	50,853	325,467	46,495	9,740,325	6,508,246
Kerosene	89,210	12,744	59,639	8,520	2,261,489	1,929,378
Lubricants	.....	.....	.....	.....	10,082	.....

TANKER SHIPMENTS FROM SAN FRANCISCO TO ATLANTIC AND GULF PORTS

Diesel and gas oil	.....	.....	91,688	13,098	227,648	.....
Gasoline	.....	.....	.....	.....	783,367	1,264,942
Lubricants	.....	.....	.....	.....	16,776	69,172
Coastwise—						
Fuel oil	63,077	9,011	64,405	9,201	2,184,119	1,742,743
Diesel and gas oil	.....	.....	.....	.....	169,165	326,235
Gasoline	50,175	7,168	122,714	17,531	2,416,394	2,969,642
Kerosene	3,576	511	.....	.....	145,620	85,406
Exports—						
Crude oil	.....	.....	.....	.....	3,075	121,603
Fuel oil	.....	.....	133,025	19,004	662,135	529,011
Diesel and gas oil	68,155	9,736	.....	.....	307,209	155,474
Gasoline	87,092	12,442	144,085	20,584	2,520,141	3,449,260
Kerosene	.....	.....	28,120	4,017	408,203	382,417
Lubricants	.....	.....	.....	.....	18,672	21,899

Deep Zone at Potrero

The past week was an exceptionally interesting one from a development standpoint as drilling operations resulted in the discovery of a new deep productive zone in the Potrero Field and were responsible for the completion of 11 wells at Long Beach and several unusually large flowing wells in the Elwood and Ventura Avenue Fields. The new deep zone which gives the Potrero Field another lease on life was discovered by the Richfield Oil Co., and, while it will increase the ultimate recovery of this field, it should not cause any alarm as it will probably be of minor consequence from a production standpoint. Several separate productive zones have been developed in the town lot section of the Potrero Field up to the present time but none of them have proved capable of sustaining economic production due to the small thickness of oil sand present. It is quite likely that the new zone just opened at Potrero will be quite similar to those previously found and developed. The Richfield's discovery well was No. 1 Coffin, which came in under a natural flow making 250 bbls. of 35.1 gravity oil and 800,000 feet of wet gas per day from 6,258 feet.

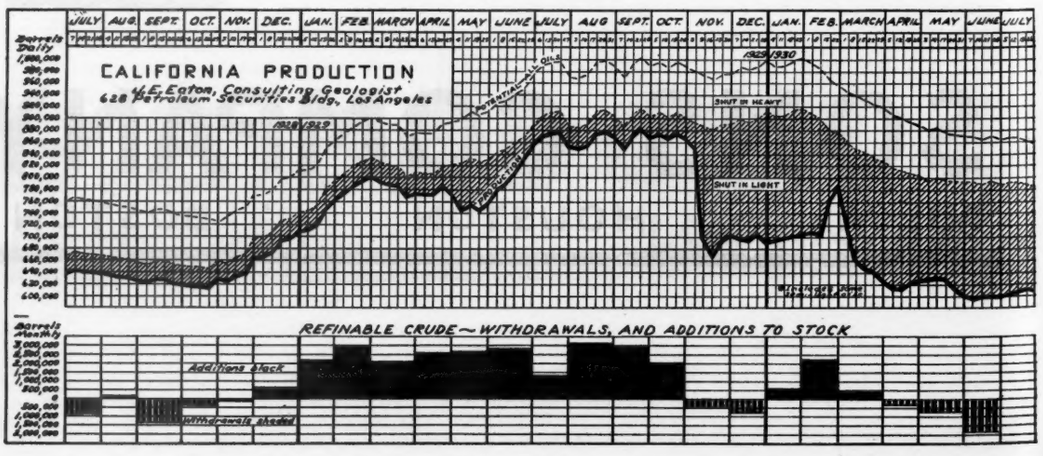
Elwood

The Barnsdall and Rio Grande added another large well to their list of producers in the prolific Elwood Field of Santa Barbara County during the past week when well No. 3 on Tideland permit No. 88 blew in flowing 9,500 bbls. of clean 36.9 gravity oil and 5,000,000 feet of saturated natural gas per day from 3,442 feet. This new well, which was finished with a 6⅝-inch liner carrying 300 feet of 100-mesh screen, will probably show a potential well in excess of 10,000 bbls. per day before the five-day flow test is concluded. The Pacific Western Oil Co. is officially listing its No. 5 on Tideland Permit No. 92 as a 10,750-bbl. well from 3,484 feet. This well blew in prematurely several weeks ago, at which time it registered an initial of 3,520 bbls. per day. It was quite evident that it was producing under a handicap with the result that the company proceeded to put it in the best mechanical shape possible. This new well of the Pacific Western is located on a 144-acre tideland permit directly adjoining the Barnsdall and Rio Grande's permit No. 88, which yielded a new well this week. The Seaward Oil Co. has finally completed well No. 2 on State tideland permit No. 91 doing 300 bbls. of 36.5 gravity oil per day from 3,650 feet. The company failed to secure a natural flow and was consequently obliged to put this well on a gas lift. The Seaward's new well is the smallest producer to be finished in the Elwood Field up to the present time and is the first project which failed to have sufficient gas pressure to result in a natural flow. The Signal Oil & Gas Co., which recently completed well No. 2 on State tideland permit No. 98 flowing 860 bbls. per day, is making preparations to start another well on this 28-acre lease and will probably start actual construction work on this new rig shortly. The Bankline Oil Co.'s No. 6 on Tideland permit No. 89 completed the customary five-day flow test early this week and is credited with a rated potential production of 1,790 bbls. from 3,420 feet, the oil being clean and testing 37.5°.

Ventura Avenue

The Associated Oil Co. finished another substantial producer in the prolific Ventura Avenue Field this week when No. 10 on the Ventura Land & Water Co.'s property was brought in under a natural flow doing 4,730 bbls. of clean 30.9 gravity oil and 7,000,000 feet of saturated gas per day from 7,750 feet. This new well is located in the extreme eastern part of the field, and, while it does not prove up any additional acreage, it clearly indicates the substantial reserve which the Associated Oil Co. has at Ventura Avenue. Development work in this field has been done along conservative lines with the result that the Associated has sufficient undeveloped acreage to sustain normal development for several years to come. This company is at the present time running 12 strings of tools at Ventura Avenue and has two additional rigs in course of construction. The Shell is working on 10 wells in the Ventura Avenue Field at the present time and is rigging up three more for early work.

The Richfield Oil Co. recently spudded in No. 3 Hobson State, a new project in the Rincon Field of Ventura County, and is consequently running two strings of tools in this field at the present time. In the extreme eastern part of the Rincon Field, the Chanslor-Canfield Midway Oil Co. is rigging up No. 2-A Hobson, a deep test which has been delayed for several weeks at 7,479 feet because of a gas blowout and resulting fire which destroyed the rotary equipment. The Vaqueros Major Oil Co. is building rig for No. 2 Union Annex, a new well to be drilled in Section 6-7-33 and rotary equipment will be moved in shortly. The company recently completed No. 1 Union Annex pumping 585 bbls. of 23.1 gravity oil per day from 2,997 feet and consequently anticipates commercial production upon completion of No. 2. The develop-



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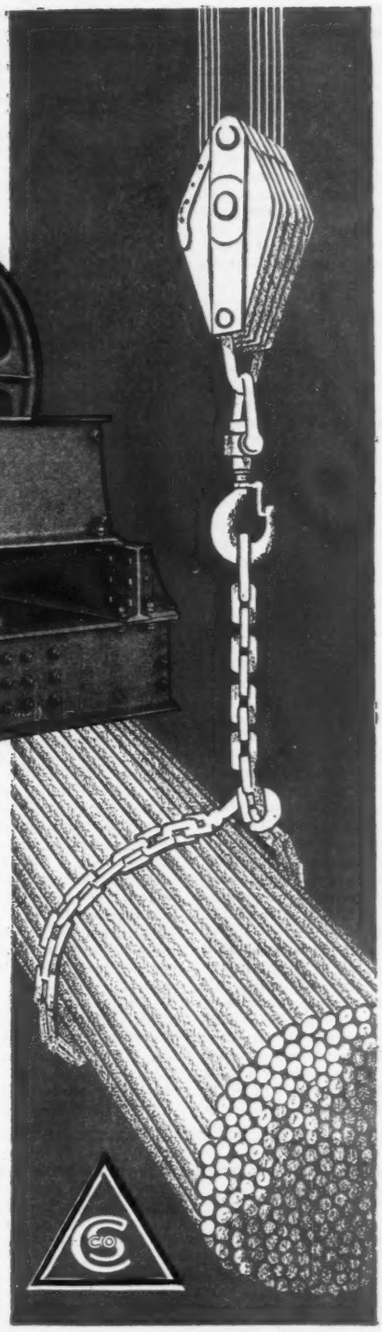

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CONTINENTAL

ment of commercial production on the Union Annex property extends the outer limits of production of the Purisima section of the Santa Maria Field approximately 2,500 feet. The intervening territory between No. 1 Union Annex and nearest production is held in a solid block by the Union Oil Co.

Long Beach

Drilling operations resulted in the completion of 11 wells in the Long Beach Field during the past week and a check indicates the probable completion of several more within the next few days. The Davis Investment Co. headed the completion list in this field during the week by bringing in No. 16 Signal flowing 3,130 bbls. of 29.6 gravity oil per day from 7,030 feet. Bixby & McFadden also chalked up a satisfactory completion this week when No. 1 Woodward, a new well, was brought in under a natural flow doing 1,530 bbls. of clean 29.2 gravity oil per day from 6,698 feet. Dabney & Johnston Oil Co.'s No. 47 Signal tanked 1,230 bbls. of 29.1 gravity oil during the initial 24-hour production test following completion at 7,179 feet, but it is quite possible that this project will show a much higher production after it has cleaned itself out and got well under way. The company's No. 52 Signal, which came in a short time ago flowing 3,575 bbls. per day from 7,013 feet, has subsequently built up and is at the present time flowing 4,520 bbls. of clean 29.2 gravity oil daily.

The Long Beach Petroleum Corp.'s initial completion in the Long Beach Field was No. 1 Signal which came in a few days ago flowing 490 bbls. of clean 30.1 gravity oil per day from 7,044 feet. The Mendin Petroleum also completed a new well during the past week when No. 1 Cerritos, located in the western end of the field, was brought in flowing 475 bbls. of clean 29.9 gravity oil and 2,000,000 feet of wet gas per day from 7,050 feet. This new well, which is flowing under a pressure of 520 pounds, was finished with a 4½-inch liner carrying 600 feet of perforated. T. J. (Uncle Tom) Cannon successfully recompleted No. 3 Jones and returned it to production flowing 465 bbls. of 29.6 gravity oil per day after redrilling and deepening it to 7,355 feet. A. N. Macrate also recompleted a former shallow zone producer this week when No. 3 MacKay was returned to production doing 387 bbls. of 28.9 gravity oil per day from 6,253 feet.

During the early part of the week Ball & Barnes completed No. 1 Signal in the deep zone at 7,022 feet, and, while this new well registered a casing pressure of 480 pounds, it was only good for 220 bbls. of clean 29.8 gravity oil per day. H. F. Allen's No. 1 Leavell was another well which showed a satisfactory casing pressure, 400 pounds, but which failed to show substantial production. This project, a former upper zone producer, was returned to production flowing 195 bbls. per day after being redrilled and deepened to 6,977 feet. The Young Petroleum Corp. only carried down No. 1-A Hilton to 4,324 feet but it registered satisfactory production upon completion at this depth as the initial output during the first 24 hours following completion was gauged at 345 bbls. Roberts & Becker successfully recompleted their No. 1 Signal after redrilling and deepening it to 7,086 feet, but it was only good for 170 bbls. of 28.2 gravity oil per day. W. A. Caston's No. 1 Long Beach was somewhat of a disappointment upon completion at 6,965 feet as this new well was only good for 189 bbls. of 28.6 gravity oil cutting 10 per cent. There are 111 strings of tools in operation at Long Beach, and since most of these wells should be completed within the next six months, it is quite obvious that this field will continue to be an important factor in state production for some time to come. This is especially true in view of the fact that in addition to the current production of 102,000 bbls. there is an additional 25,000 bbls. per day curtailed in conformity with the existing conservation program.

Playa Del Rey

There were no developments of special importance in the Playa Del Rey Field during the past week, although 11 new wells were spudded in during the period in question. The Union Oil Co. spudded in its first two wells on the recently acquired townsite lease adjoining its Del Rey property and piles are being driven for a third well. The Union has 688 acres under lease in this area, the Del Rey Land Co.'s holdings aggregating 518 acres and the King Vidor, 170 acres. Recent developments indicate that the Union's No. 1 Del Rey, which is at the present time flowing 790 bbls. per day from 4,016 feet, is located approximately on the apex of the structure, which, if true, should prove up a substantial portion of this property for commercial production. The Union has not tested out the potentiality of the Recreation zone underlying its acreage in this field but that it should be found highly productive is evidenced by the fact that the Superior's No. 1 Moses, located approximately 1,000 feet west, is flowing a little better than 1,000 bbls. per day with clocklike regularity. C. C. Beem's No. 1 Del Acqua came in prematurely during the early part of the week flowing 300 bbls. per day from the shallow zone but it subsequently sanded up. This new well came in with the swab stuck in the hole and would undoubtedly have registered a much larger production except for this handicap. No. 1 Del Acqua, an offset to the Mohawk Oil Co.'s No. 1 J., flowing 400 bbls. per day from 3,866 feet, was bot-

(Continued on Page 131)

SHOWING OF HIGH GRADE OIL FOUND IN TEST IN MONROE COUNTY, MICH.

By Paul A. Elliott

MUSKEGON, Mich., Aug. 11.—No new producers of oil or gas in commercial quantities were completed anywhere in the State of Michigan during the past week, although several wells in scattered localities had showings of oil or were expected to drill in shortly. One of the most interesting recent developments was the showing of oil struck in the Trenton limestone in the Molo Oil Holding Corp.'s No. 1 Reau, SE SW, Section 18-6s-6e, Dundee Township, Monroe County. The Trenton was shot last week in this well and it was shut down. An analysis of the oil showed it to be paraffin base, containing about 29 per cent gasoline of high antiknock quality, a good kerosene fraction, heavy paraffin content of a quality suitable for low viscosity lubricants and a residue which, with the paraffin distillate removed, will produce a high grade of cylinder oil.

The new well is located on the county line road between Monroe and Lonawee Counties, half a mile north of the Dundee-Deerfield road, and is not far from the LaPointe-Dusseau well, brought in as a small producer in the same formation last March.

Two more wells are being drilled in this southeastern corner of Michigan, where the Deerfield Oil Co. drilled a well about 11 years ago without success. The other two wells are the Mole Oil Holding Corp.'s No. 1 Lidster, NE NW NW, Section 18-6s-6e, Dundee Township, Monroe County, and the La-Du Oil Corp.'s No. 1 Mrs. Anna Loug, NE NE, Section 2-7s-5e, Deerfield Township, Lonawee County. Completion of the Lidster well is expected within a few days.

Other Operations

One well in the new Leaton area northwest of the Mt. Pleasant proven field was expected to drill into the Dundee formation as the probable third producer of oil in the new pool. It is the New York Petroleum Royalty Corp.'s No. 1 Wezensky, NW NW, Section 30-15n-3w, Denver Township, Isabella County. It was shut down at 3,650 feet, just above the pay sand, as the week closed.

In the Muskegon proven field, the Central Gas & Oil Co.'s No. 4 John Joldersma, NW NE SW, Section 8-10n-16w, Muskegon Township, Muskegon County, was cased and ready to drill into the Dundee pay sands.

The Reed Oil Co. reported that it had

(Continued on Page 131)

IMPORTANT SOUTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status
Union, No. 1 Orchard Dale, Los Angeles Co.	10- 3-11	3,595	sd. sh. drilling
Olympic Realty Corp., No. 1 Venice, Los Angeles Co.	14- 2-15	101	sd. drilling
Burlingham Pet., No. 1 Compton, Los Angeles Co.	17- 3-13	4,490	suspended
Francis, Don, No. 1 Compton, Los Angeles Co.	8- 3-13	572	set pipe
Central Oil Co., No. 1 Compton, Los Angeles Co.	28- 3-13	5,094	resume work
Ohio, No. 1 Moneta, Los Angeles Co.	35- 3-14	7,150	hd. sd. drilling
Guajome Oil Co., No. 1 El Nido, Los Angeles Co.	33- 3-14	rig	suspended
Cal. Ventura Oil Co., No. 1 Manhattan, Los Angeles Co.	30- 3-14	6,525	suspended
Cal. Ventura Oil Co., No. 1 Hermosa, Los Angeles Co.	31- 3-14	3,388	set pipe
McMahon & McDonald, No. 1 Watts, Los Angeles Co.	12- 3-14	4,665	suspended
Tri-State Oil Co., No. 1 Watts, Los Angeles Co.	12- 3-14	4,194	sd. sh. drilling
Rio Grande Oil Co., No. 1 Watson, Los Angeles Co.	17- 4-13	6,170	hd. sd. drilling
Shell, No. 1 Van Nuys, Los Angeles Co.	19- 2-15	4,060	sd. sh. drilling
Anchor Oil Co., No. 1 Puente, Los Angeles Co.	19- 2-10	4,820	suspended
Rio Hondo Pet., No. 1 Puente, Los Angeles Co.	14- 2-10	2,688	br. sh. drilling
Bidart Oil Co., No. 1 Puente, Los Angeles Co.	15- 2-10	mtl.	building rig
Rucker, R. C., No. 1 Puente, Los Angeles Co.	27- 2-10	3,660	suspended
Bardeen Pet., No. 1 Puente, Los Angeles Co.	9- 2-10	3,170	br. sh. drilling
Sherman, J. W., No. 1 Puente, Los Angeles Co.	33- 2- 8	850	suspended
Keck & Hall, No. 1 Puente, Los Angeles Co.	32- 2- 8	1,120	gas, shut in
Marcel Pet. Co., No. 1 Puente, Los Angeles Co.	31- 2- 8	2,548	cleaning out
Celito Oil Co., No. 1 Monterey Park, Los Angeles Co.	25- 1-12	5,278	resume work
Los Gatos Oil Co., No. 1 El Monte, Los Angeles Co.	16- 1-11	1,950	rebuild rig
Olmypic Corp., No. 1 Calabasas, Los Angeles Co.	18- 1-17	5,695	gr. sd. drilling
Union, No. 1 Coyote, Sansinena, Los Angeles Co.	30- 2-10	4,492	br. sh. drilling
Tureco Oil Co., No. 1 Whittier, Los Angeles Co.	29- 2-11	5,600	sd. sh. drilling
Western Gulf, No. 1 Brea Canyon, Los Angeles Co.	28- 2- 9	6,501	hd. sd. drilling
Lamona Oil Co., No. 1 Pomona, Los Angeles Co	34- 1- 9	850	hd. sd. drilling
Graham & Loftus, No. 1 Coyote, Orange Co.	18- 3- 9	5,924	sd. sh. drilling
Mesa Pet., No. 1 Newport, Orange Co.	21- 6-10	4,910	suspended
Hall, H. L., No. 1 Newport, Orange Co.	20- 6-10	790	suspended
Standard, No. 1 Newport, Orange Co.	26- 6-10	1,591	sd. sh. drilling
Fidelity Pet. Co., No. 1-A Murrietta, Riverside Co.	23- 7- 3	701	cleaning out
Hemet Pet. Co., No. 1 Ward, Riverside Co.	9- 5- 1	3,560	suspended
Imperial Valley Oil Co., No. 1 Brawley, Imperial Co.	32-11-10	3,000	hd. sd. drilling
McGregor Synd., No. 1 Del Mar, San Diego Co.	17-14- 3	1,265	cleaning out
Borderland Oil Co., No. 1 Encinitas, San Diego Co.	12-13- 4	2,424	hd. sd. drilling
Borderland Oil Co., No. 1 Point Loma, San Diego Co.	30-16- 3	2,416	gr. sd. drilling
Carr, O. K., No. 1 Capistrano, San Diego Co.	13- 8- 8	4,183	cleaning out
Grey, H. H., No. 1 Redlands, San Bernardino Co.	25- 1- 2	2,525	fishing
Girard & Grimes, No. 1 Corona, San Bernardino Co.	8- 2- 8	1,549	cleaning out
Western Gulf, No. 1 Santa Ana, Orange Co.	12- 3- 8	....	grading

IMPORTANT NORTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status
Standard, No. 1 Point Conception, Santa Barbara Co.	X- 5-34	5,290	hd. sd. drilling
Universal Consd., No. 1 Point Conception, Santa Barbara	30- 5-34	4,000	redrilling
Prairie Oil Co., No. 1 Lompoc, Santa Barbara Co.	15- 7-35	4,520	hd. sd. drilling
Fields Gasoline Co., No. 1 Santa Maria, Santa Barbara Co.	8- 9-33	3,945	br. sh. drilling
Western Gulf, No. 1 Santa Maria, Santa Barbara Co.	5- 9-33	....	location
Barnsdall, No. 1 Gato Ridge, Santa Barbara Co.	9- 8-32	2,570	sd. sh. drilling
Deuel Petroleum Co., No. 1 Santa Ynez, Santa Barbara Co.	9- 7-30	3,130	suspended
Carey, A., No. 1 Goleta, Santa Barbara Co.	1- 4-28	2,880	abandoned
General Pet., No .1 Goleta, Santa Barbara Co.	21- 4-28	4,533	shut in
General Pet., No. 2 Goleta, Santa Barbara Co.	21- 4-28	4,350	suspended
General Pet., No. 3 Goleta, Santa Barbara Co.	21- 4-28	rig	rigging
General Pet., No. 134 Goleta, Santa Barbara Co.	21- 4-28	1,485	suspended
General Pet., No. 136 Goleta, Santa Barbara Co.	21- 4-28	1,016	suspended
General Pet., No. 137 Goleta, Santa Barbara Co	21- 4-28	1,026	suspended
General Pet., No. 138 Goleta, Santa Barbara Co.	21- 4-28	4,931	suspended
General Pet., No. 139 Goleta, Santa Barbara Co.	21- 4-28	1,035	suspended
General Pet., No. 143 Goleta, Santa Barbara Co.	21- 4-28	1,040	suspended
Boles Oil Co., No. 140 Goleta, Santa Barbara Co.	22- 4-28	1,040	suspended
Ring Oil Co., No. 1 Goleta, Santa Barbara Co.	16- 4-28	5,570	abandoning
U. S. Pet., No. 141 Goleta, Santa Barbara Co.	20- 4-28	1,035	suspended
U. S. Pet., No. 142 Goleta, Santa Barbara Co.	20- 4-28	1,032	suspended
U. S. Pet., No. 143 Goleta, Santa Barbara Co.	20- 4-28	1,019	suspended
El Camino, No. 149 Goleta Tideland, Santa Barbara Co.	22- 4-28	1,035	suspended
Bolsa Chica, No. 191 Goleta, Santa Barbara Co.	24- 4-29	1,195	sd. sh. drilling
Caldwell Brown, No. 159 Goleta, Santa Barbara Co.	24- 4-29	1,040	suspended
Cochran, J. H., No. 1 Naples, Santa Barbara Co	7- 4-29	1,312	sd. sh. drilling
Wildcat Oil Co., No. 1 Santa Maria, Santa Barbara Co.	20-10-35	4,995	sd. sh. drilling
Pacific Western, No. 1 Gibraltar, Santa Barbara Co.	14- 5-27	2,345	suspended
Shell, No. 1 Summerland, Santa Barbara Co.	18- 4-25	4,404	hd. sh. drilling
Standard, No. 2 Casitas, Santa Barbara Co.	26- 4-25	1,400	sd. sh. drilling
Continental, Tideland permit No. 121, Santa Barbara Co.	33- 4-25	1,085	suspended
Continental, Tideland permit No. 122, Santa Barbara Co.	33- 4-25	1,020	suspended
Continental, Tideland permit No. 123, Santa Barbara Co.	33- 4-25	1,020	suspended
Continental, Tideland permit No. 124-A, Santa Barbara	33- 4-25	418	suspended
Continental, Tideland permit No. 125, Santa Barbara Co.	33- 4-25	1,455	suspended
Continental, Tideland permit No. 126, Santa Barbara Co.	33- 4-25	1,034	suspended
Continental, Tideland permit No. 127, Santa Barbara Co.	33- 4-25	1,055	suspended
Continental, Tideland permit No. 128, Santa Barbara Co.	33- 4-25	1,054	suspended
Continental, Tideland permit No. 129, Santa Barbara Co.	33- 4-25	1,020	suspended
Exeter Oil Co., Tideland permit No. 163, Santa Barbara	32- 4-25	76	suspended
Getty, Geo. F., No. 120 Carpinteria, Santa Barbara Co.	32- 4-25	1,024	suspended
Getty, Geo. F., No. 130 Carpinteria, Santa Barbara Co	32- 4-25	1,029	suspended
Shell, No. 5 Oxnard, Ventura Co.	14- 2-20	2,670	sd. sh. drilling
Prairie Oil & Gas Co., No. 1 Ventura, Ventura Co.	30- 3-22	6,690	sd. sh. drilling
Bolsa Chica, No. 1-A Temescal, Ventura Co.	4- 4-18	2,506	oil sand
Rio Grande, No. 1 Lankershim, Ventura Co.	13- 4-19	1,791	redrilling
General Pet., No. 1 Fillmore, Ventura Co.	6- 3-19	2,920	testing
Associated, No. 1 Rincon Creek, Ventura Co.	19- 4-24	2,080	suspended
Pure Oil Co., No. 1 S. P. Canyon, Ventura Co.	15- 4-21	1,188	sd. sh. drilling
Superior Oil Co., No. 1 Sespe, Ventura Co.	14- 4-21	mtl.	building rig
Norton Oil Co., No. 1-A Buttonwillow, Kern Co.	7-29-24	4,264	sd. sh. drilling
Shell, No. 1 Weed Patch, Kern Co.	29-30-29	5,029	testing
Pet. Sec., No. 1 Edison, Kern Co.	24-29-29	1,946	hd. sd. drilling
Symark Oil Co., No. 1 Edison, Kern Co.	24-29-29	2,130	suspended
Sayre, F. M., No. 1 Edison, Kern Co.	5-30-29	4,220	suspended
Elmer Oil Co., No. 1 Tejon, Kern Co.	15-30-30	4,940	hd. sd. drilling
Hancock Oil Co., No. 1 Jasmine, Kern Co.	23-25-27	2,665	suspended
Shell, No. 1 Semitropic, Kern Co.	17-27-23	4,677	sd. sh. drilling
Moran & DeCamp, No. 1 Mojave, Kern Co.	26-10-14	505	hd. sd. drilling
Bardeen, H. A., No. 1 San Emidio, Kern Co.	18-10-23	1,190	rig. rotary
Bardeen, H. A., No. 2 San Emidio, Kern Co.	10-10-23	3,388	sd. sh. drilling
Stabler, W. W., No. 1 Commanche Pt., Kern Co.	4-11-18	2,040	redrilling
Ritchie, J. J., No. 1 Tejon, Kern Co.	33-11-19	1,014	sd. sh. drilling
Wrenn, J., No. 1 Antelope Plains, Kern Co.	32-25-17	812	sd. sh. drilling
Hannon, Tom, No. 1 Devils Den, Kern Co.	25-25-18	2,619	suspended
Richfield, No. 1 Kreyenhagen, Fresno Co.	33-22-16	2,990	hd. sd. drilling
Ohio Oil Co., No. 1 Coalinga, Fresno Co.	8-21-15	2,015	br. sh. drilling
Petroleum Securities, No. 2 Huron, Fresno Co.	28-20-16	7,390	suspended
Panorama Oil Co., Well No. 1, San Luis Obispo Co.	7-31-21	4,019	suspended
Latin Amer. Pet., No. 1 Shandon, San Luis Obispo Co.	21-27-15	4,483	suspended
Paso Robles Synd., No. 1 Creston, San Luis Obispo Co.	27-27-11	3,941	cleaning out
Union, No. 1 King City, Monterey Co.	8-22- 8	3,250	suspended
Standard, No. 1 King City, Monterey Co.	23-22-17	4,900	hd. sd. drilling
O'Donnell, J. E., No. 1 Dudley Ridge, Kings Co.	7-23-20	4,310	suspended
Penn Western, No. 1 Tulare Lake, Kings Co.	24-21-18	1,338	suspended
Wellport Oil Co., No. 1 Devils Den, Kings Co	9-24-17	3,940	suspended
Twin States Oil Co., No. 1 Point Arena, Mendocino Co.	14-12-17	4,075	hd. sd. drilling
Oakdale Oil Co., No. 1 Oakdale, San Joaquin Co.	3- 2-10	3,535	suspended
Orinda Pet., Well No. 1 Contra Costa Co.	32- 1- 3	600	sd. sh. drilling
White, Roy, No. 1 Pixley, Tulare Co.	8-23-26	4,022	suspended
Terra Bella Oil Co., No. 1 Porterville, Tulare Co.	35-22-27	912	drilling out
Western Oil Co., No. 1 Porterville, Tulare Co.	35-22-27	975	gr. sh. drilling
Consolidated Properties, Ltd., No. 1 Porterville, Tulare Co.	35-22-27	900	sd. sh. drilling
Terra Bella Drilling Co., No. 1 Porterville, Tulare Co.	34-22-27	925	sd. sh. drilling
Payatt Oil Co., No. 1 Porterville, Tulare Co.	34-22-27	rig	suspended
Turner Oil Co., No. 1 Porterville, Tulare Co.	34-22-27	rig	rigging up
Colusa Oil Co., No. 1 Bush, Colusa Co.	31-15- 4	670	hd. sd. drilling

Watch North Ector and South Andrews

Area Surrounding Fuhrman Test Attracting Attention of Operators With Hope of Opening Possible Major Pool

By L. E. Bredberg
Fort Worth Bureau, The Oil and Gas Journal

FORT WORTH, Tex., Aug. 11.—Northern Ector and southern Andrews Counties, in the area surrounding the Fuhrman Petroleum Co.'s No. 1 W. T. Ford, in the SW Section 16, Block A-43, Andrews County, are attracting attention as it is the belief of many operators and producers of the Permian Basin that this area will add another pool, possibly a major producing pool, to West Texas.

Last week the gas was overestimated by many, but the amount was later cut to about 30,000,000 feet, the well having decreased during the week to around 26,000,000 feet, and although it is not spraying oil, oil drips from the control head where it accumulates, proving that the gas is wet and carrying oil, and that there is a great possibility of an oil pool being opened there. Many are of the opinion that the Deep Rock Oil Co. and others' wells, 6 miles to the north, are on the edge of the pool, and that this will be proved conclusively when other wells are drilled in the area.

It has been rumored that the Fuhrman Petroleum Co. has sold a half interest in the test and in the acreage it holds around the well, which is nearly 2,000 acres, but no verification can be obtained, although it is possible the Shell Petroleum Corp. was considering purchasing it.

The well is still shut down at 4,067 feet after encountering the heavy gas from 4,062-67 feet. Tools are still in the hole, and the well is being killed with water so that the tools can be fished out and the well deepened in an effort to pick up the oil pay. This process will take some time, and a bad fishing job may hold up drilling indefinitely, but it is the owner's intention to go ahead with the well as soon as possible to find out its capacity.

Pipe Line Plans

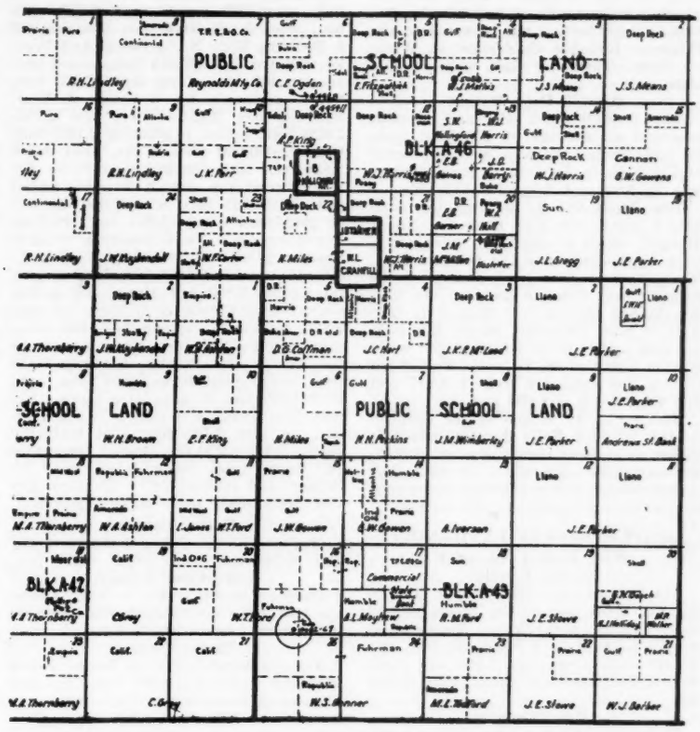
The Atlantic Pipe Line Co., which has an 8-inch line running near the Deep Rock producers to the north, in Andrews County, is not taking any production from those two wells, but its sister company, the Atlantic Oil Producing Co., may look favorably upon the purchase of a half interest in the Fuhrman well with intentions of running the production to its Midland tank farm. The pipe line through this county now runs to Hobbs, N. Mex., from which place it is running oil. The Andrews area may be another source of supply or some pipe line company or purchasing company. The Magnolia Pipe Line Co. is surveying for a line from its Midland tank farm to Hobbs, such a survey running through Andrews County near this area and making another potential outlet for any producing area which might be opened here. The Magnolia Pipe Line Co. is also surveying for an 8-inch line from Wink in Winkler County to Hobbs, N. Mex., and if this line is built oil from the Hobbs Pool will be run to Wink thence by way of Magnolia's 8-inch line from that point to its Midland tank farm. A connecting line may be constructed from Andrews County to this 8-inch carrier, just as was done from the Penn Pool in Ector County from which pool the Cosden Oil Co. is running oil to its Big Spring refinery by way of the Magnolia Pipe Line Co.'s 8-inch line.

These are three possible outlets for any oil that might be produced in Andrews County, and the area may rest assured that a connecting line will be constructed if the wells are of sufficient caliber to warrant the building of lines.

Major companies owned most of the surrounding acreage near the Fuhrman well, and all other acreage was much sought after during the past week. Broderick and Calvert, independent operators of Fort Worth, owned several sections between the Fuhrman well and Penn and others' No. 1 Leon Goodman at 4,309 feet this week, but struck sulphur water from 4,390-99 feet and is ready to be plugged marking finis to the acreage surrounding this test. Several showings of oil were encountered in the test, and it was exceptionally interesting during the past few weeks.

Sunray-Llano Well

Sunray Oil Co. and Llano Oil Co.'s No. 1 Jones in Section 6, Block 44, Township 1-S, in the northern part of the Penn Pool, Ector County, is now being put on the pump estimated good for 100 or 150 bbls. per day after swabbing at the rate of 6 bbls. per hour with the water exhausted. Top of the pay is 3,736-66 feet. Total depth is 3,823 feet but was plugged back to 3,817 feet and shot with 40 quarts from 3,788-3,808 feet, plugged back to 3,812 feet and shot with 150 quarts from 3,736-66 feet.



—Map by courtesy of Heydrick Mapping Co.

Plat showing location of Fuhrman Oil Co.'s No. 1 Ford in the SW. Section 16, Block A-43, Andrews County, Texas, 6 miles south of the Deep Rock Oil Co. and others' two producing wells in Sections 6 and 11, Block A-46. Arrow marks the discovery well of the county, and circle marks the new gasser which is estimated gassing from 50,000,000 to 200,000,000 feet of gas per day.

O'Brien Pool Completions

Gulf Production Co. completed two wells in the O'Brien Pool, northern Ward County, this week and made locations for two. No. 10 O'Brien was completed for a 90-bbl. well at a total depth of 2,775 feet, and its No. 11 O'Brien was completed at a total depth of 2,765 feet for a 100-bbl. well.

Northeastern Fisher County had another small producer this week when Roeser and Pendleton and Landreth Production Co.'s No. 1 Steele in the SW Section 210, B.B.&C. Survey, swabbed 170 bbls. in six hours from sand encountered at 3,197-3,205 feet. The latter is the total depth.

Shaheen and Prairie Oil & Gas Co.'s No. 1 King, located 6,750 feet from the north and 150 feet from the east of the M. Bueno Survey, Jones County, was completed as a 50-bbl. well from sand logged at 1,994 feet. Total depth is 1,999 feet. This is a small area which has had several oil and gas showings and made small wells, this being the best completed thus far. It is a short distance west of the town of Hawley.

Phillips Petroleum Co.'s No. 1 Whitten in the NW Section 35, Block LL, T.C. R.R. Survey, Schleicher County, was given a 5-quart shot from 6,327-37 feet and a 10-quart shot from 6,322-32 feet making no change in the status of the test, and more shot will probably be given it in an effort to make a commercial producer out of it. It has had several showings of oil, but none of substantial size.

WEST TEXAS PRODUCTION
Week Ending August 9

County—	No. wells	Bbls.
Andrews	1	124
Crane	351	31,455
Crockett	48	1,910
Ector	54	9,985
Fisher	7	1,750
Garza	5	31
Howard-Glasscock	521	27,495
Irion	5	178
Jones	73	1,320
Loving	24	1,710
Mitchell	146	2,213
Pecos	487	107,130
Reagan	258	20,950
Runnells	3	12
Scurry	5	11
Taylor	2	99
Upton	249	7,270
Ward	25	2,835
Winkler	595	77,315
Total production this week		293,793
Total production last week		298,620
Decrease		4,827

WEST TEXAS
Week Ending August 9

Ector County

Simms Oil Co. and others' No. 3 University, top pay 3,520 feet, initial production 29 bbls. before shot, shot 150 quarts from 3,500-3,607 feet, initial production after shot 35 bbls. first hour, then shut in, total depth 3,500-3,607 feet. The Texas Company and others' No. 8 Connell, top pay 3,498 feet, shot 500 quarts from 3,490-3,596 feet, flowed 300 bbls. first 14 hours after shot, before shot estimated as 100-bbl. well, total depth 3,610 feet.

Irion County

Carl Cromwell and others' No. 2 Tankersley, dry and abandoned, total depth 1,633 feet.

Hudspeth County

The California Oil Co.'s No. 1 University, dry and abandoned, total depth 4,848 feet.

Pecos County

Black, Doran & McGee's No. 1 Pecos Valley Oil Co., top pay 1,545 feet, initial production 100 bbls., total depth 1,575 feet. Cardinal Oil Co.'s No. 2 Tippett;

(Continued on Page 114)

WILDCAT OPERATIONS IN TEXAS PANHANDLE

Week Ending August 11

CARSON COUNTY

Company, well, farm name, section and block—	Remarks—
Danciger O. & R. Co.'s No. 1 Block, 330 ft. N and E lines, Sec. 112, Blk. 4, I.&G.N. Sur.	S.D. 3,024 ft; T.P. 3,021 ft; I.P. 30 bbls. oil daily.
Gibson Oil Corp.'s No. 1 Moore, 990 ft. N, 330 ft. E, N½ SE, Sec. 20, Blk. 7, I.&G.N. Sur.	Drlg. 3,325 ft.
North American Oil Co.'s No. 1 Burnett, C NW, Sec. 97, Blk. 4, I.&G.N. Sur.	Rig on ground.
North American Oil Co.'s No. 1 Burnett, C SE, Sec. 98, Blk. 4, I.&G.N. Sur.	Rig.
Reiger & Steckoll's No. 1 Martin, 330 ft. N and W, SW, Sec. 90, Blk. 7, I.&G.N. Sur.	12,000,000 ft. gas 2,815-2,910 ft; S.D. 2,950 ft.
Shamrock O. & G. Co.'s No. 1 Thompson, 330 ft. S and W lines, E 80 ac., NE, Sec. 5, Blk. 7, I.&G.N. Sur.	17,000,000 ft. gas 2,755 ft; S.D. 3,404 ft; T.P. 3,171 ft; swbd. 16 bbls. on test; shot 100 qts. 3,180-3,280 ft; to P.B.
Suloch Oil Co.'s No. 1 Bost, 990 ft. S, 330 ft. E, SW, Sec. 1, Blk. S.&F.	S.D. 3,240 ft; to plug back for gas.
Sweeney et al's No. 1 Locke, 164 ft. N and W, 40-ac. tr. along R.R. in Sec. 57, Blk. 7, I.&G.N. Sur.	S.D. 1,000 ft.

(Continued on Page 115)

North Texas and Panhandle Keep On

Activity Unabated Despite Proration Movement. Gray County Has More Completions Than for Several Weeks

By L. E. Bredberg
Staff Correspondent, Louisiana-Arkansas

FORT WORTH, Tex., Aug. 11.—Although several North Texas and Panhandle operators have asked that several areas should not be curtailed according to recommendations made by the general committee to the Railroad Commission, this district continues to be one of the most active in the way of drilling wells, completions and locations. Some wells in prorated fields are shot to increase their production and these same wells choked in according to the proration plan of the field. A few of the counties in North Texas, however, have cut down on their activities in the past few weeks.

Gray County, in the Texas Panhandle, witnessed more completions this week than for several weeks, consequently the daily average for the Panhandle district was increased over 1,100 bbls. per day. The best well of the county this week was Prairie Oil & Gas Co.'s No. 2 Combs and Worley, completed at a total depth of 2,855 feet for an initial production of 2,480 bbls. with 25,000,000 feet of gas. Another good well was the Humble Oil & Refining Co.'s No. 6 Combs and Worley, which came in for an initial production of 2,165 bbls. with 13,000,000 feet of gas at a total depth of 2,820 feet.

Nine other producers were completed in the flush areas of the county, the 11 making a total initial production of 9,145 bbls. with 83,000,000 feet of gas.

One area in Young County, the Riggs or Larimore Pool, north of New Castle, which was exceptionally interesting a few weeks ago, and until curtailed by the Prairie Oil & Gas Co., which purchases the oil, is now almost completely shut down on activities.

The Continental Oil Co., which announced a 50 per cent cut in purchases to take effect August 1, has rescinded that order and will await the outcome of the Railroad Commission's decision upon general proration for the State. The 50 per cent cut was to be made in the Wichita Falls district, where the company is a major purchaser, and the curtailment would have been keenly felt by the operators from whom the company has been purchasing.

To Shoot Oil Show

Shamrock Oil & Gas Co.'s No. 1 Shary, in the NW cor. of the NE of Section 187, Block 3-T, T.&N.O. Survey, Moore County, which formerly appeared as an extension to the producing area to the northwest, encountered a hole full of water this week at 3,530-33 feet and is now being plugged back to shoot the oil show from 3,498-3,404 feet. Total depth is 3,533 feet. Shooting is almost assured of making a small producer of the well and extending the producing area.

Deep Rock Oil Co.'s No. 1 Lawson in the SW cor. of the Harriet Nail Survey, Abstract 790, near Hood in the southwestern part of Cooke County, is going on the pump after swabbing 204 bbls. the first 24 hours from saturated lime at 1,321-31 feet. The first oil showing was found from 1,308-21 feet and an increase was encountered deeper. Bottom of the hole is 1,331 feet. This opens another area to production in Cooke County, although drilling will probably be rather slow for the time being, due to the lack of demand for North Texas crude.

A short distance east of Cisco, Eastland County, Keough and others' No. 1 Jones, offsetting Hyer and other's gasser which was brought in a few months ago, extending production towards Cisco, came in for a 135-bbl. well after shooting with 120 quarts from 3,445-93 feet. Total depth is 3,499 feet, but the test was plugged back to 3,493 feet for the shot. Hyer and other's well will now be rigged up and drilled deeper in an effort to pick up the lime pay found in the Jones well. Such a good well in this area is stimulating activity, and the city of Cisco will see more tests in its vicinity.

Some time ago a $250,000 sale by Brazelton Brothers and Williams on their 40-acre lease in the Larimore Pool, Young County, to the Julian Oil & Royalty Co. was reported, and now it is reported the company will build a loading rack on the Wichita Valley Railroad about 5 miles north of New Castle, and will ship production via tank car to the Primrose Refining Co.'s plant at Wichita Falls. There are eight wells on this lease.

Overall Pool Output

The Overall Pool, Coleman County, produced an average of 473 bbls. from 18 wells during the past week, produced 16,724 bbls. in July, total gross production to August 1 being 583,112 bbls.

The Green Oil & Refining Co. completed its 3-inch line from its No. 1 Morgan, which is about 2¼ miles northwest of production in the Graham Pool, Young County, to a loading rack on the railroad near Graham and ran the first oil through the line on August 7. The well is now producing about 135 bbls. per day, and is to be drilled deeper when storage facilities are relieved. Top of the pay of this extension well is 3,847 feet and total depth is 3,850 feet.

Young County is one of the counties in the Wichita Falls district, which is rather quiet from the standpoint of drilling activities. Proration by pipe line companies and water shortage has helped to cut down activities in the county.

COMPLETIONS IN PANHANDLE

Week Ending August 9

Carson County

The Texas Company's No. 1-B Garner, top pay 3,108 feet, initial production 50 bbls., total depth 3,175 feet. Texas Interstate Pipe Line Co.'s No. 1 Burnett, 35,000,000 feet of gas from 2,263 feet, 2,360 feet and 2,400 feet, total depth 2,560 feet.

Gray County

McAuley and others' No. 4 Morse, top pay 2,500 feet, initial production 40 bbls., total depth 2,596 feet. Continental Oil Co.'s No. 1 Carrie Wright, top pay 2,785-2,804 feet and 2,810-44 feet, 30,000,000 feet of gas from 2,710-32 feet, total depth 2,844 feet. Danciger Oil & Refining Co.'s No. 8 Beck, top pay 2,884 feet, initial production 400 bbls., total depth 2,893 feet. Derosa Oil & Gas Co.'s No. 2 Saunders, top pay 2,920 feet and 2,958 feet, initial production 430 bbls., shot 360 quarts from 2,921-3,014 feet, total depth 3,035 feet. Humble Oil & Refining Co.'s No. 4 Combs and Worley, top pay 2,794-2,815 feet, initial production 400 bbls., total depth 2,865 feet. Same company's No. 6 Combs & Worley, top pay 2,731-45 feet and 2,785-2,820 feet, initial production 2,165 bbls. with 13,000,000 feet of gas, total depth 2,820 feet. Magnolia Petroleum Co.'s No. 8 Faulkner, top pay 2,833 feet, initial production 555 bbls. with 5,000,000 feet of gas, total depth 2,920 feet. Phillips Petroleum Co.'s No. 3 Combs & Worley, top pay 2,796 feet, initial production 1,800 bbls. with 10,000,000 feet of gas, total depth 2,865 feet. Prairie Oil & Gas Co.'s No. 1 Combs & Worley, top pay 2,826 feet, initial production 435 bbls., total depth 2,857 feet. Same company's No. Combs and Worley, top pay 2,845 feet, initial production 2,480 bbls. with 25,000,000 feet of gas, total depth 2,855 feet. The Texas Company's No. 2 Harrah, top pay 3,134 feet, shot with 160 quarts 3,145-3,226 feet, initial production 440 bbls., total depth 3,235 feet. W. Wilson and others' No. 1 Heaston, dry and abandoned, total depth 3,259 feet.

Donley County

Marine Oil Co.'s No. 1 Sawyer, dry and abandoned, total depth 4,210 feet.

Hutchinson County

Badger Oil Co.'s No. 4 Tom Lewis, top pay 2,878 feet, initial production 60 bbls., total depth 2,952 feet.

Motley County

The Exploration Co. of Texas' No. 6 Matador Land & Cattle Co., dry and abandoned, total depth 4,160 feet.

Wheeler County

Lone Star Gas Co.'s No. 1 Sawyer, dry and abandoned, total depth 4,210 feet.

NORTH TEXAS PRODUCTION

Week Ending August 9

Panhandle District—	Prod.
Carson County	9,265
Hutchinson County	20,651
Gray County	67,035
Moore County	358
Potter County	11
Wheeler County	605
Total this week	97,725
Total last week	96,546
Increase	1,179
Wichita Falls District—	
Archer County	16,819
Baylor County	876
Clay County	738
Cooke County	3,264
Foard County	175
Jack County	2,400
Haskell County	51
Montague County	6,482
Throckmorton County	758
Wilbarger County	23,188
Wichita County	24,384
Young County	15,486
Total this week	94,621
Total last week	95,315
Decrease	694
Ranger District—	
Brown County	6,034
Callahan County	3,100
Coleman County	2,951
Comanche County	1,224
Palo Pinto County	501
Eastland County	4,395
Shackelford County	6,874
Stephens County	5,305
Total this week	30,384
Total last week	30,655
Decrease	271

COMPLETIONS IN NORTH CENTRAL TEXAS

Archer County

E. S. Bell's No. 1 Turbeville, dry and abandoned, total depth 1,506 feet. John Dixon and others' No. 1 Richardson, dry and abandoned, total depth 1,139 feet. Fain & McGaha Oil Corp.'s No. 2 Portwood, dry and abandoned, total depth 1,383 feet. Golding & Cochran's No. 1 Love, dry and abandoned, total depth 1,382 feet. Golding & Cochran and Dixie Oil Co.'s No. 1 Lanster, oil show 1,276-88 feet, initial production 21 bbls. oil and 39 bbls. of water, total depth 1,450 feet. Heydrick & Hickman's No. 3 Abercrombie and Taylor, dry and abandoned, total depth 1,502 feet. Junker & Perkin's No. 1 Hunt, dry and abandoned, total depth 1,508 feet. M. Keys and others' No. 1 Coffelt, dry and abandoned, total depth 1,350 feet. W. E. Maxson, Jr.'s No. 8 Green, top pay 1,113 feet, shot 20 quarts, initial production 30 bbls., total depth 1,125 feet. Moran-Golding & Cochran's No. 2 Brown-Smith, dry and abandoned, total depth 1,500 feet. Nicholson and others' No. 2 Taylor, top pay 679 feet, initial production 12 bbls., total depth 740 feet. George L. Pace's No. 2 Arnold, top pay 1,198 feet, initial production 55 bbls., total depth 1,218 feet.

Clay County

Merrick and Goldsmith's No. 1 Givens and others, dry and abandoned, total depth 1,776 feet.

Cooke County

Danciger Oil & Gas Co.'s No. 1 Reeves and others, dry and abandoned, total depth 1,803 feet. Fain & McGaha Oil Corp.'s No. 2 Vestal, dry and abandoned, total depth 1,105 feet. United Producers and others' No. 1 Dennis, dry and abandoned, total depth 1,526 feet.

Denton County

Lloyd Oil Corp. and others' No. 1 Gracie, dry and abandoned, total depth 2,004 feet.

Wilbarger County

Empire Gas & Fuel Oil Co.'s No. 14-B Waggoner, total depth 2,588 feet, plugged back to 2,300 feet, oil sand 2,290 feet, initial production 3 bbls. Same company's No. 1 Waggoner, oil show 2,466

(Continued on Page 75)

WILDCAT OPERATIONS IN WEST TEXAS

Week Ended August 11

ANDREWS COUNTY

Company, well, farm name, section and block—	Remarks—
Deep Rock Oil Co. et al's No. 1 Mathis, 900 ft. from S and W, Sec. 4, Blk. A-46, Public School Land	Total depth 5,088 ft.; plugged back to 4,400 ft.; shot 520 qts. 4,257-4,465 ft.; filled up 900 ft. oil in 18 hrs.; swabbing dry.
Deep Rock Oil Co.'s No. 1 Miles, 900 ft. S, 1,650 ft. E of NW cor., Sec. 22, Blk. A-46, School Land	Shut down 4,765 ft.
Fuhrman Pet. Corp.'s No. 1 Ford, 440 ft. from S and 2,200 ft. from W of Sec. 16, Blk. A-43, Public School Land	Total depth 4,068 ft.; making 30,000,000 ft. dry sulphur gas.
Deep Rock Oil Co. et al's No. 1 King, 330 ft. from N and 2,310 ft. from E, Sec. 11, Blk. A-46	Flows 25 bbls. average per day; flows every four days; total depth 4,454 ft.
Maer & Staniforth's No. 1 Meador, C SW Sec. 8, Blk. A-41	Underreaming 1,670 ft.
R. R. Penn's No. 1 Wilson, C Sec. 20, Blk. A-37, School Land	Shut down 4,650 ft.; small flow every 2 or 3 days from show at 3,085 ft.

BREWSTER COUNTY

Brewster Oil Co.'s No. 1 fee, 2,640 ft. S and 2,598 ft. E of NW cor., Sec. 45, Blk. G-15, G.C.&S.F. Sur.	Shut down 1,935 ft.
E. L. Chapman's No. 1 Skinner, C SW SE, Sec. 100, Blk. 2, G.C.&S.F. Sur.	Shut down 1,302 ft.
Trans-Pecos Oil & Gas Co.'s No. 1 Jones, 920 ft. from N and 2,500 ft. from E of Sec. 18, Blk. G-15, G.C.& S.F.R.R. Sur.	Show oil 1,830 ft.; shut down 2,345 ft.
Van McPhail's No. 1 McIntyre, SE cor., Sec. 59, Blk. 352, 7 mi. S of Alpine	Shut down 1,750 ft.

COKE COUNTY

Arkansas Fuel Oil Co.'s No. 1 Stepp, 1,020 ft. NE, 2,340 ft. W of SE cor., Sec. 35, Blk. 1-A, H.&T.C. Sur.	Drlg. 3,970 ft.

CONCHO COUNTY

Beesley et al's No. 1 S. Waring Est., 1,320 ft. from S and E of A. T. Robinson Sur., Abst. 2,120	Machine.
Turner et al's No. 1 Borsig, 150 ft. from S of NE cor., G. Emmig Sur. 130, 6 mi. W of Paint Rock	Drlg. 1,508 ft.

(Continued on Page 114)

Pipe Line Construction News

Gas Line From Kansas To Colorado Springs To Be Built Next Year

DENVER, Colo., Aug. 11.—The city of Colorado Springs, Colo., which for two years has had a 20-inch natural gas pipe line running within a few miles of the city limits, but which up to this time has not had natural gas for domestic consumption, has signed a contract that will end a long controversy involving some interesting factors. The question of a privately-owned company selling gas at wholesale to a city for retail distribution through a system owned and operated by the municipality entered into the former negotiations. While that was what happened in the end, the outcome will be that a new pipe line system more than 200 miles long will be constructed by another concern and the city will not avail itself of a supply already within 15 miles of the city limits.

The city council of Colorado Springs entered into a contract on July 30 with Arthur K. Lee, of Dodge City, Kans., which provides that the city will purchase natural gas for a period of 20 years from a company to be formed by Mr. Lee; that the company will construct a 10-inch line from the Stevens and Morton Counties gas field in southwestern Kansas, to the city limits and begin the delivery of gas to the city by August 31, 1931. Mr. Lee deposited a certified check for $25,000 with the city to bind the contract.

The Colorado Interstate Gas Co. built and completed in the summer of 1928 a 340-mile pipe line from the Amarillo Field in Texas to Denver. This line runs 15 miles to the east of Colorado Springs. It supplies gas at wholesale at the city limits of Pueblo to the Pueblo Gas & Fuel Co., a subsidiary of the

(Continued on Page 149)

SHEEHAN GETS CONTRACT

The Sheehan Pipe Line Construction Co. of Tulsa has been awarded the contract for the laying of 210 miles of 8-inch line from Barnsdall, Okla., to Kansas City, Mo., for the Great Lakes Pipe Line Co., and also for laying 55 miles of 6-inch line from Barnsdall to Ponca City, Okla., for the same company. These lines will form part of the system being constructed by the company for the transportation of gasoline from Okmulgee, Barnsdall and Ponca City, Okla., and points in Kansas to Milwaukee and other Great Lakes points. The Continental Oil Co. and Barnsdall Oil Co., jointly formed the Great Lakes Pipe Line Co. It is expected the Skelly Oil Co. and Mid-Continent Petroleum Corp. will also become part of the company with the possibility other Mid-Continent refiners may become interested in it.

WORK ON DEL RIO GAS LINE

DEL RIO, Texas, Aug. 4.—The Texas Gas Utilities Co., which has the franchise for furnishing natural gas to Del Rio, Eagle Pass and Winter Garden cities, has completed one-half of the gas line on the Eagle Pass link, and is progressing on the work in Del Rio, which will soon be completed. Gas will be used from the Rycade Field in Maverick County.

LONE STAR GATHERING LINE

The Lone Star Gas Co. is constructing a new 12-inch gathering line from the gas field on the Groves ranch, northwest of Cisco in Eastland County, Texas, to the company's No. 4 gasoline plant near Ranger, a distance of about 16 miles. It is a welded line.

YOUNGSTOWN ABOUT READY TO MAKE LARGE-SIZE ELECTRIC-WELDED PIPE

By B. E. V. Luty

PITTSBURGH, Pa., Aug. 11.—Youngstown Sheet & Tube Co. expects to begin commercial production of large diameter electric weld pipe this week. The experimental machine, which proved the success of the process and is the subject of a patent, has been dismantled and commercial equipment set up in its place. Initial production is on an order for 24-inch booked recently and eventual capacity is expected to be 4 to 5 miles daily. It probably will take a while to work up to full speed.

Youngstown thus will be a close third in the manufacture of large diameter electric weld pipe, Smith having been the first nearly three years ago, while National Tube Co. started a fortnight ago. National is in regular production, but not up to full output, which is expected to be 4 to 5 miles daily.

All capacity for making the larger sizes of pipe and tubing is in operation, including seamless, electric weld and lap weld by the old method. A number of lap weld furnaces have been abandoned in the last few years, but there is still a good sized capacity. The newer units in seamless and electric weld are not up to their capacity in all cases as yet.

Demand for large diameter pipe and tubing has really been in excess of capacity thus far or producers would not be booked so far in advance. There are various projects on foot, indicating that there will be full engagement of the increasing capacity for a long while. This is the only branch of the steel industry that is at even close to capacity.

The course of steel affairs in general has been disappointing since early in the year. It may be said that there have been three separate disappointments. The first of these was that demand did not increase after the middle of February as normally it does, but that may be ascribed to tonnage having increased too much during January and the fore part of February. Peak production is usually in March, occasionally in April, but this year production began to decrease in the latter part of February, and the official monthly reports have shown continuous declines since February.

Demand fell off rather slowly for a time, and then came the second disappointment, the large decrease in June, as a result of which July production was below its usual rate during the first half. It is the regular thing for July to be a light month, but this time July was particularly light.

The third disappointment is in demand not showing any visible or material increase at the present time, when the usual seasonal increase is overdue. There remain predictions that conditions will improve, but they are made in a rather half-hearted fashion and seem to be based chiefly on precedent. As a matter of fact, only four of the last seven years have had an autumn improvement after the usual decline to July. In 1927 the dullness of July continued, while in 1923 and 1929 July was off only slightly and then declines continued throughout the remainder of the year. Thus the seasonal precedent is not a strong one.

There is in fact no direction in which steel demand appears likely to have much increase, although some small increases are reasonably certain, in connection with automobiles and farm implements. The annual rail buying movement, which usually begins in a mild way in the latter part of September, is expected to start a little earlier this year, but the roads may not release much tonnage for early rolling.

Pipe prices are well maintained all along the line. The majority of other finished products are rather easy with a declining tendency in some cases.

APPALACHIAN GAS PLANS TO EXTEND TEXAS LINES

SAN ANTONIO, Texas, Aug. 11.—Plans are under way for the construction of additional main natural gas pipe lines by Texas Gas Utilities Co., subsidiary of Appalachian Gas Corp., it was announced by Ross Holmes, chief engineer of the company, with first ground to be broken before the end of the month.

The first construction will be that of the Crystal City extension, to connect with the main pipe line linking the Uvalde Field with the city of Uvalde, which has been in operation for some time. The second section of the work will carry the line through the "Winter Garden" district of Texas, connecting a number of cities and towns, including Carrizo Springs, Asherton and Caterina. This will give the company two main trunk lines, one tapping the Chittim Field and the other the Uvalde Field. A future development of the construction program calls for the linking of the two fields for the purpose of gaining maximum productive capacity.

Texas Gas Utilities Co. completed a main pipe line from Chittim Field to Del Rio and Devil's River, through which it is now supplying natural gas to the new electric generating station of Central Power & Light Co. Work on a second main pipe line, connecting the Chittim Field with Eagle Pass, Texas, and Piedras Negras, Mexico, is now in progress.

KANSAS PIPE LINES

Vickers Petroleum Co. is rushing work on its 4-inch pipe line from the Potwin refinery in Butler County, Kansas, to the company's lease in the Eastborough Pool, a distance of about 30 miles. More than 5 miles of the line has been welded and is ready to lower into the ditch.

The Prairie Oil & Gas Co. announced the construction of a pipe line to the Schurr Pool in Rice County. About 40 miles of 8-inch pipe will be necessary to connect the area with the company's other lines. The line will be an extension of the Voshell Pool's line and will provide an outlet for production in that area, which is without any pipe line. The Prairie company announced the line would be built in recognition of the earnest co-operation of the operators in the Schurr Pool district in orderly development. The area now has five wells with a potential output of 7,000 bbls. a day, and two other tests shut down on top of the pay horizon.

MIDLAND UNITED ADDITIONS

CHICAGO, Aug. 4.—Approximately 185 miles of new pipe lines are being laid by subsidiaries of the Midland United Co. which when completed will bring the total mileage of the company to 841. The Interstate Public Service Co. is adding 85 miles, the Northern Indiana Public Service Co. 44 miles, and the West Ohio Gas Co. 56 miles of new gas pipe line.

CITIES SERVICE PLANS FOR ENLARGING SYSTEM

A construction program for increasing the service capacity of the entire pipe line system of Cities Service Gas Co., natural gas subsidiary of the Empire Companies, has been announced. The expansion program, which is to insure an adequote supply of natural gas to meet the peak winter demands, includes the addition of 24 compressor station units of 1,000 horsepower each or a total of 24,000 horsepower to the compressor stations in Oklahoma, Texas and Kansas which assist in transporting the natural gas along the lines which serve Wichita, Lawrence, Kansas City and other northern markets.

The construction of new compressor stations at Blackwell and at Drumright in Oklahoma; an extension of the Oklahoma City 20-inch line from Dilworth, Okla., to a point south of Wichita; improvement of the Dilworth-Cambridge 16-inch line for high pressure service and the laying of 15 miles of 16-inch pipe line from Independence, Kans., to Joplin, Mo., are included in the program. Contracts have been awarded and work is under way with the contemplated completion date allowing time to care for increased demands on the system next fall and winter.

Of major importance is the addition of 15 compressor station units or a total of 15,000 horsepower to the stations which transport the gas through the 20-inch line from the Texas Panhandle to Wichita, Kansas City and adjacent territory. Two units each are being added to compressor stations at Pampa and Higgins, Tex.; Mooreland, Okla., and Corwin, Matfield Green and Ottawa in Kansas.

Three units are being added to the compressor station at Wichita. The added units will increase the daily capacity of the Texas line from approximately 100,000,000 cubic feet to approximately 125,000,000 cubic feet of natural gas.

Construction is under way on the 32-mile extension of the Oklahoma City 20-inch line from Dilworth, Okla., to a point a few miles south of Wichita, where it will connect the Oklahoma City Field with the company's distribution system serving northern markets.

The compressor station under construction at Blackwell includes five units or a total of 5,000 horsepower which will force gas from the Oklahoma City Field to compressor stations at Cambridge and at Wichita. Additional compressor units may be added later to the Blackwell station.

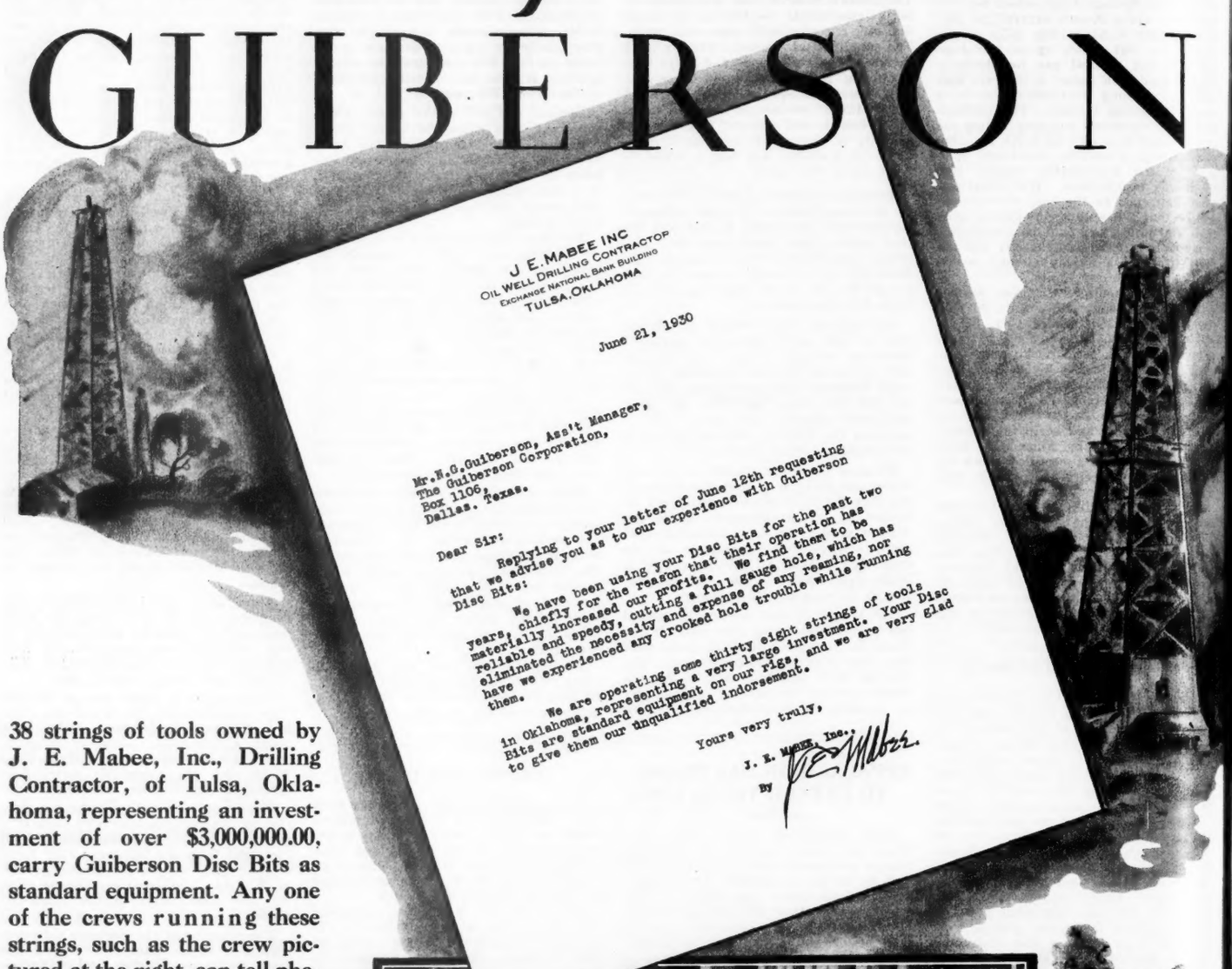
The capacity of the company's 16-inch pipe line which transports natural gas from Seminole, Hughes and Okfuskee Counties in Oklahoma will be increased by a 4,000-horsepower compressor station now under construction at Drumright. This line connects with the Texas line at Ottawa.

Necessary replacements and revamping of the Dilworth to Cambridge 16-inch line is going forward in preparation for operating the line under higher pressure and consequent increased capacity.

MAVERICK COUNTY LINES

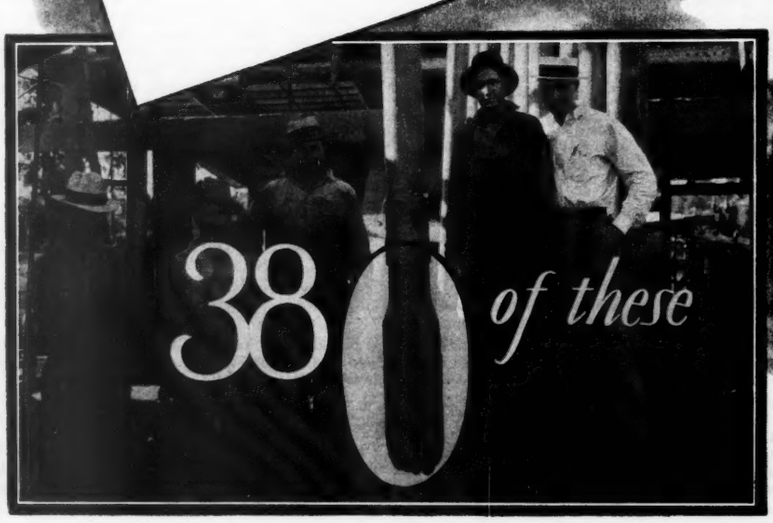
The natural gas line of Texas Gas Utilities Co. has been completed from Rycade gas field, Maverick County, to the power plant of the Central Power & Light Co. on Devil's River, and gas is being run. Six-inch line from the same field to Eagle Pass is being laid, and distributing systems in both Del Rio and Eagle Pass are being built. A line is also being surveyed from the company's gas wells in Zavala County to Crystal City and Carrizon Springs.

The WORLD'S
Drilling Contractor
GUIBERSON


J. E. MABEE INC
OIL WELL DRILLING CONTRACTOR
EXCHANGE NATIONAL BANK BUILDING
TULSA, OKLAHOMA
June 21, 1930
Mr. H. G. Guiberson, Ass't Manager,
The Guiberson Corporation,
Box 1106,
Dallas, Texas.
Dear Sir:
Replying to your letter of June 12th requesting that we advise you as to our experience with Guiberson Disc Bits:
We have been using your Disc Bits for the past two years, chiefly for the reason that their operation has materially increased our profits. We find them to be reliable and speedy, cutting a full gauge hole, which has eliminated the necessity and expense of any reaming, nor have we experienced any crooked hole trouble while running them.
We are operating some thirty eight strings of tools in Oklahoma, representing a very large investment. Your Disc Bits are standard equipment on our rigs, and we are very glad to give them our unqualified indorsement.
Yours very truly,
J. E. Mabee, Inc.,
By

38 strings of tools owned by J. E. Mabee, Inc., Drilling Contractor, of Tulsa, Oklahoma, representing an investment of over $3,000,000.00, carry Guiberson Disc Bits as standard equipment. Any one of the crews running these strings, such as the crew pictured at the right, can tell phenomenal stories of reduced drilling time—of straight holes, reamed full gauge—and of low operating costs—all attributed to their Guiberson Disc Bit, which they have grown to regard as a valuable friend and one which they always want on the job.

From left to right, the men in the picture, taken in the Oklahoma City Field, are: J. E. Jones, Driller; Frank Jones, Backup Man; C. A. Hastings, Fireman; L. A. Payne, Pipe Racker and Toney Short, of the Guiberson Corporation.



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is recognized without a rival as the world's largest drilling contractor. This position signifies leadership in a business which is noted for hardships—where keen judgment and correct decisions are the essence of success. Ten years of exemplary operations have brought J. E. Mabee, Inc., from a modest, one-rig beginning to a present day organization owning thirty-eight strings of tools representing an investment of over $3,000,000.00.

Guiberson Four Disc Reaming Rotary Bits are standard equipment with these thirty-eight strings. This means that the income producing medium, or in other words, the thing that does the work for an investment of $3,000,000.00 is a Guiberson Disc Bit. Considering that the Guiberson Disc Bit is thus depended upon throughout the organization—the fact must be regarded as an indication of superb confidence.

But this confidence did not come before a trial. J. E. Mabee watched the Guiberson Disc Bit perform. He noted its remarkable speed, its full-gauged, reaming descent, its straight hole drilling—and then last, but most important of all, he summed up its cost of operation and selected it because it cut down his expenses and, as he says in his letter, "Materially increased our profits."

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GUIBERSON

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OKLAHOMA FIELDS

(Continued from Page 50)

developments in Township 14-2w, until the wildcat test of the Mid-Kansas Oil & Gas Co. and Ramsey Petroleum Co. is completed in Section 32-14-3w. Practically all the acreage is under lease and the chances are good for unitization of the entire township for several tests.

Tatums Pool Production

The production from the Tatums Pool in Carter County has been ordered prorated by State Umpire Ray M. Collins effective August 10. Production in the pool was recently extended by several large producers. According to the umpire's order the per cent of production allowed is as follows: Wells making up to 100 bbls. a day allowed to produce 50 per cent; wells of 100 to 200 bbls., 37½ per cent; 200 to 300 bbls., 26¼ per cent; 300 to 400 bbls., 22½ per cent; and 400 bbls. and up, 18¾ per cent.

The order also includes that each drilling test shall take a shutdown period before being brought to production, equal to the accumulated shut-in time and accumulated equivalent time resulting from the pinching of producing wells from the beginning of the proration period. The shutdown time for the Tatums Pool is as follows: Shut down seven days for cement to set; open one day for production test; shut in 16 days. The shutdown time started August 10.

The pool developed into a major producing area when the Trevelyn Oil Co.'s No. 1 Mitchell, in Section 24-1s-3w, Carter County, extended production in the Tatums area more than a mile, making around 1,500 bbls. a day. Same company's No. 2 Mitchell, NW cor. SW SE, Section 24-1s-3w, is the latest producer in the new extension to the Tatums Pool, flowing 815 bbls. the first 11 hours. It is producing from a series of sands at 2,216-2,452 feet. The next well completed was the Wirt Franklin Petroleum Corp.'s No. 1 Mitchell, NW cor. SE, Section 24-1s-3w. It landed a liner preparatory to being completed. It had oil sand at 2,316-2,452 feet. The well made 1,387 bbls. the first 17 hours' gauge.

Noble County

The water shortage for drilling operations is delaying tests in the Noble County area. Prairie Oil & Gas Co. is expected to make a location to protect a short-time lease in the NE cor. SE, Section 5-20-1w, Noble County, provided water can be obtained. Twin State Oil Co. has made a location for No. 1 Trusdell, NE cor. NW SW, Section 4-20-1w, Noble County. Sinclair Oil & Gas Co.'s wildcat test in Harper County is showing oil after being plugged back and shot.

Western Oklahoma at last has oil production. The test is No. 1 Howell, C SW SW, Section 14-26-24w, Harper County, which is believed to be turning from a gas well into an oil well. A sample of the crude oil shows to be an amber colored fluid of high gravity. The flow of gas is coloring up as the 6-inch casing is being pulled from the hole and no estimate can be made as to the potential production until the casing is removed from the hole. The oil will be produced through the 9-inch casing. The gas volume was estimated at 7,000,000 feet and the company had intended to complete the test as a gas well. The total depth of the well was 8,583 feet making it the deepest test ever drilled in Oklahoma. When no deep pay was found the company plugged the test back to 6,700 feet and after a shot nothing was found and it was plugged back to 5,400 feet where a showing of oil and gas was found near the bottom of the 9-inch casing. It is one of the few tests in the western part of the State that has found showings of oil. The Ramsey Petroleum Co.'s test in Cimarron County in the Oklahoma Panhandle found a showing of oil several years ago.

Kiowa County

Oil is being sought in the northern part of Kiowa County. A new wildcat has been announced, Cooper & Terhune's No. 1 Grebb, C NW SE, Section 6-7-16w, Kiowa County, near the Washita County line. The test was located near the center of a block of leases consisting of about 3,000 acres. It is expected to be drilled to a total depth of 2,500 feet and was located after a geological survey had been made of the area. Some express the opinion the test is located over an old shore line in the Anadarko Basin. The same operators recently completed a dry hole north of Carnegie in Caddo County.

The new operation is in the territory served by the Kiowa refinery which has been operating in the Kiowa Field for the past two years and is under the ownership of R. L. Walde of Gotebo. The wildcat is a few miles north of production in the Kiowa Field.

Caddo County, which has been holding the interest of the oil operators for the past year because of the new deep sand production found in the Cement Pool in Caddo County, is also undergoing an active leasing campaign. The Gypsy Oil Co. has been a heavy buyer of acreage east of Anadarko in Townships 9-9w, 8-9w and 7-9w. In the northern part of the county in Townships 12-11w and 12-12w, considerable leasing has been in progress.

Magnolia Petroleum Co. has completed another producer in the Cement Pool. No. 9 Lindsey, NW cor. SW, Section 36-6-10w, Caddo County, swabbed 111 bbls. the first four hours from a series of sand at 3,141-3,341 feet. Same company is preparing to complete its No. 9 Caddo-Rowe, SE cor. SW NE, Section 36-6-10w. The casing has been cemented at 3,163 feet and the total depth of the test is 3,328 feet.

Mid-Kansas Oil & Gas Co. and Ramsey Petroleum Co.'s No. 9 Wade, SW cor. SE SW, Section 2-5-9w, the extension well on the east side of the Cement Pool, is still cleaning out and is swabbing around 115 bbls. a day. A number of drilling tests in the Cement Pool are shut down on account of the water shortage in that area. Several operators are drilling water wells in the pool.

Oklahoma City's Shut-In Production

The initial production of the shut-in wells in the Oklahoma City Pool that have been allowed to produce for 24 hours or less as of August 9, and are now shut in for the proration period, was 799,377 bbls. This initial production and the approximate dates each well will be opened for its regular producing period follows:

I. T. I. O.:			
Sudik	*1	[1]30,000	.....
Salsman	*4	[2]225	8-14-30
M. Fuzzell	3	6,301	8-21-30
G. Button	5	[3]9,000	8-21-30
Trosper Park	*6	[4]5,000	8-21-30
E. Trosper	*1	[5]16,271	8-20-30
Jones	*10	[6]2,604	8-19-30
L. Farley	4	7,395	8-18-30
Mary Sudik	*4	16,199	8-27-30
Canfield Button	3	[7]6,494	8-26-30
School Land	*2	[8]4,482	8-27-30
School Land	*1	[9]4,734	8-27-30
School Land	*3	[10]7,734	9- 2-30
S. Peterson	*2	[11]6,327	9- 2-30
A. Brokaw	*2	2,855	9- 1-30
C. Trosper	*2	[12]2,385	9- 1-30
Johnson	*5	2,406	8-31-30
Farley	*1	6,408	8-30-30
Mary Sudik	*7	[13]5,169	9- 3-30
Rensimer	*1	[14]1,930	9-14-30
M. Sudik	*8	[15]8,916	9-14-30
H. G. Trosper	*1	[16]7,595	9-14-30
S. Peterson	*2	[17]7,591	9-12-30
E. Trosper	*2	[18]185	9-12-30
Theimer	*5	[19]562	9-12-30
Spillman	*1	10,227	9-26-30
Holmes Gray	*1	[20]4,173	9-26-30
N. Emerson	6	[21]113	9-25-30
Carrico	*1	[22]7,517	9-27-30
N. Emerson	11	[23]699	9-27-30
Jones	*13	36,186	9-28-30
W. J. Phillip	*1	[24]7,586	9-29-30
Jones	*14	[25]562	9-31-30
Corff	*1	[26]917	10- 3-30
Habegger	*1	[27]3,296	10- 4-30
Peterson	*5	[28]3,755	10- 5-30
Phillips	*1	[29]7,586	10- 5-30
Carrio	*1	9,744	10- 4-30
Coppenger	*1	10,010	10- 5-30
Watters	*5	[30]1,544	10- 5-30
M.-K.-T.	*1	[31]3,264	10- 6-30
H. G. Trosper	*3	7,002	10- 6-30
Boulevard	*1	[32]891	10-13-30
Huffman	*1	3,015	10-12-30
Watters	*6	3,362	10-10-30
Lemon	*2	4,502	10- 9-30
Watters	*4	2,703	10- 9-30
H. G. Trosper	*3	14,720	10- 9-30
W. Franklin:			
Lowery	*8	[1]10,000	8-20-30
Wright	*1	5,805	8-27-30
Theimer	*8	[2]20,000	9-29-30
Holder	*1	[3]3,000	10- 6-30
Page	*1	7,209	10- 2-30
Cromwell:			
Trosper Park	*15	5,240	8-13-30
Trosper Park	*6	11,921	8-30-30
Trosper Park	*20	[4]8,726	9-22-30
Trosper Park	*23	14,623	9-22-30
Trosper Park	*24	[5]3,008	9-23-30
Sinclair:			
School Land 54	*2	4,420	8-13-30
School Land	*4	9,050	8-14-30
Farley Fuzzell	2	10,865	9- 4-30
Vincl	*5	[6]5,730	8-14-30
Vincl	*8	[7]3,720	8-14-30
School Land 67	*2	6,770	8-14-30
School Land 54	7	[8]8,000	8-30-30
Vincl	*11	31,290	8-30-30
School Land 54	*13	7,150	8-20-30
School Land 54	*10	17,220	8-30-30
School Land 67	*3	15,940	8-29-30
School Land 54	*16	[9]8,145	9- 1-30
Vincl	*9	[10]7,075	9- 2-30
School Land 54	*6	[11]2,000	9-14-30
Vincl	*14	[12]2,225	9-13-30
Vincl	*16	37,905	9-13-30
Donnell	*1	3,060	9-13-30
School Land 69	*1	[13]2,570	9- 2-30
School Land 54	*16	15,545	9- 4-30
Vincl	*6	[14]10,500	10- 1-30
Coline:			
Olds	*11	[15]1,284	8-15-30
Clauer	6	5,596	8-28-30
Olds	*7	[16]1,763	8-28-30
Clauer	*10	4,496	9- 1-30
Clauer	*9	11,948	9-24-30
Warren	7	8,826	9-25-30
Clauer	*13	[17]545	10-10-30
Slick:			
Dunivan	*1	[18]13,482	8-15-30
Hoopes	*8	798	8-14-30
Carter	*1	[19]9,891	8-16-30
Townsend	*1	[20]4,798	8-16-30
Classen	*1	[21]1,711	8-29-30
Foote	*1	[10]10,000	8-27-30
G. Milner	*1	[22]9,924	9-14-30
Storie	*1	8,636	9- 3-30
Crawford	*1	13,883	9-23-30
Baker	*4	19,328	9-21-30
Baker	*1	[23]1,428	10- 5-30
Milner	2	12,886	10- 2-30
Page	*1	[24]3,433	10-13-30
Baker	*2	[10]10,250	10-11-30
Heenan & Co.:			
Cunningham	*2	[12]12,000	8-11-30
Mid-Texas:			
Hiddleston	*1	2,320	10- 2-30
Prairie:			
Hiddleston	9	[25]4,310	8-20-30
Jack Shaffer et al:			
Jones Community	1	2,345	8-21-30
Hall & Briscoe:			
Lindsay	2	[26]944	9- 1-30
Wrightsmith Oil Co.:			
Smith	*1	[5]5,312	9- 2-30
Phillips Pet. Co.:			
Traders Comprio	*1	4,055	9-25-30
Prairie:			
Sigmon	*4	7,520	10- 8-30
Shell:			
Egermeyer	*1	[22]2,043	10-10-30
Plains & Denver:			
Boulevard	*1	4,968	10-13-30
Century Pet. Co.:			
Wyatt	1	[13]3,000	10-14-30
Total	111	799,377	

*Wells producing from the Simpson sand. All others are producing from the Arbuckle lime.

[1]Estimated. [2]Thirteen hours. [3]Fourteen hours. [4]Twelve hours. [5]Five hours. [6]Eighteen hours. [7]Sixteen, one-half hours. [8]Seventeen hours. [9]Nineteen hours, 45 minutes. [10]Sixteen hours. [11]One hour, 15 minutes. [12]Thirteen hours, 55 minutes. [13]Eleven and one-half hours. [14]Fifteen hours. [15]Twenty-one and one-half hours. [16]Nineteen hours. [17]Fifteen and three-quarter hours. [18]Eighteen and one-half hours. [19]Six hours. [20]Fifteen hours, 40 minutes. [21]Ten and one-quarter hours. [22]Four hours. [23]Eight hours. [24]Eleven hours, 10 minutes. [25]Seventeen hours, 30 minutes. [26]Fourteen and one-half hours. [27]Ten hours, 15 minutes. [28]Twenty-one hours. [29]Two and one-third hours.

These notations indicate the number of hours and wells produced on their initial production test.

Greater Seminole Production

Another decline was registered in the production from the Greater Seminole area for the week ending August 4. The total production from the important pools was 197,454 bbls. The Seminole area averaged 126,243 bbls. from 1,895 wells. The daily gauges from the different pools in the Greater Seminole area was as follows:

Pool—	Wells	Bbls.
Little River	375	23,059
East Little River	84	12,114
Carr City	60	4,987
Maud	139	3,036
Mission	101	5,446
Bowlegs	280	13,990
Earlsboro	291	16,216
South Earlsboro	27	9,166
East Earlsboro	155	13,875
Seminole	266	14,469
East Seminole	33	2,421
Searight	84	7,464
Allen	269	15,669
Asher	26	1,198
West Asher	20	7,223
Konawa	92	16,920
St. Louis	486	22,916
Sasakwa	53	7,185
Total	2,841	197,454

Seminole Oil Shipments

Pipe line companies shipped a total of 192,246 bbls. from the Greater Seminole area for the week ending August 4. The daily average shipments by companies and tank car deliveries were as follows:

Company—	Semi-nole	Asher Pearson St. Louis	Konawa
Barnsdall	1,841	.....	.....
Champlin	8,124	.....	420
Continental	330	.....	.....
Consolidated	....	2,539	.....
Cosden	2,983	.....	6,591
Deep Rock	3,125	565	.....
Empire	4,015	.....	.....
Gulf	12,591	.....	.....
Independent	....	1,479	.....
Magnolia	7,771	5,449	.....
Oklahoma	22,132	2,122	469
Prairie	12,668	4,477	3,971
Prod. & Refs.	1,518	.....	.....
Pure	4,837	.....	.....
Shell	3,587	202	492
Sinclair	34,032	7,822	5,449
Texas	7,543	1,763	2,402
Tidal	8,244	3,746	.....
White Oak	1,483	.....	.....
Total	136,829	32,426	19,891
Tank cars	4,100		
Grand total	140,929		

Actual Production

The daily gauges from the Oklahoma City Pool, for the seven days ending August 11, showing the date, number of barrels produced each day, number of wells on production, and total number of wells completed each day, were as follows:

Date—	Bbls.	Wells prod.	Wells comp.
August 5	116,849	48	394
August 6	80,764	39	396
August 7	69,893	34	397
August 8	87,244	37	399
August 9	72,709	34	399
August 10	33,635	27	404
August 11	24,546	21	405

Oklahoma City Oil Shipments

The total shipments from the Oklahoma City Pool were 93,519 bbls. for the week ending August 7. The average daily shipments were as follows:

Company—	Bbls.
Empire	18,734
Magnolia	8,135
Oklahoma	19,259
Prairie	14,915
Sinclair	20,349
Shell	0
Tidal	2,554
Healdton	0
I. T. I. O.	9,682
Total	93,519

Caddo County

Magnolia Petroleum Co.'s No. 3 White, SW cor. SE, Section 25-6-10w, is a locationo. No. 4 Gregory, SE cor. NW SE, Section 31-6-9w, is an old well preparing to deepen from 3,348 feet.

Carter County

Magnolia Petroleum Co.'s No. 2 Brady, SW cor. SE, Section 13-1s-3w, is a location. Ames Drilling Co.'s No. 1 Hooks, SW cor. SE SE, Section 13-1s-3w, is a rig on ground. Carter Oil Co.'s No. 1 Franklin, NE cor. NW NE, Section 24-1s-3w, is a rig on ground. Wirt Franklin Petroleum Corp.'s No. 2 Hooks, SW cor. NW NE, Section 24-1s-3w, is rigging up rotary. Schermerhorn and others' No. 5 Crockett, SW cor. NE SW, Section 23-1s-3w, has been completed for 20 bbls. in sand 2,638-2,700 feet, total depth 3,951 feet. Wirt Franklin Petroleum Corp.'s No. 1 Hooks, NW cor. NE, Section 24-1s-3w, made 544 bbls. in sand 2,155-58 feet, total depth 2,500 feet.

Comanche County

Ashcroft and others' No. 1 Wiseman, NE cor. NE, Section 29-2-10w, is drilling at 841 feet. Cooper and others' No. 4 Hallum, CNL SE SW, Section 3-3-10w, has been abandoned at 1,440 feet.

Coal County

Blackwell Oil Co.'s No. 1-A Gumm Brothers, SW cor. NE NW, Section 26-3n-9e, is dry and abandoned at 1,790 feet.

Cotton County

Wirt Franklin Petroleum Corp.'s No. 4 School, SE cor. SW SW, Section 36-1s-10w, is a rig on ground. Garvin and others' No. 7 Patterson, NE cor. NW NW, Section 1-2s-10w, is a rig on ground. Shasta Oil Co.'s No. 6 Moore, NW cor. NE SW SW, Section 2-2s-10w, is a rig. Garvin and others' No. 6 Patterson, NW cor. NW, Section 1-2s-10w, made 6 bbls. in sand at 2,190-2,205 feet. Shasta Oil Co.'s No. 5 Moore, SW cor. SE NW SW, Section 2-2s-10w, has been completed for 10 bbls. in sand at 2,182-2,204 feet.

Creek County

Sidwell Drilling Co.'s No. 1-A McGilbra, SW cor. NE NE, Section 30-14-8e, is an old well preparing to deepen from 3,434 feet. Westfall Drilling Co.'s No. 1 Nave, SE cor. NW, Section 1-18-8, is drilling at 1,505 feet. Wright and others' No. 24 Jones, NW cor. NW, Section 24-17-10, made 20 bbls. in sand 1,873-1,909 feet, total depth 1,912 feet.

Lima Oil & Gas Co.'s No. 1 Bigpond, NW cor. NE SE, Section 36-15-7, has been completed for 30 bbls. in sand 3,285-99 feet.

Grady County

Natural Gas Producing Corp.'s No. 1 Ridley has been abandoned at 2,519 feet.

Hughes County

Magnolia Petroleum Co.'s No. 1 Kiker, SW cor. NE SE, Section 8-7-8, is a location.

Latimer County

Midwestern Oil & Gas Co.'s No. 1 Hulsey, SE cor. NE SW, Section 1-6-22, has been completed for 17,000,000 feet of gas in sand 1,539-1,684 feet.

Marshall County

Bilbo Oil Corp.'s No. 15 Talefeno, SW cor. NE SE, Section 14-5s-5e, is drilling at 620 feet. No. 7 Davis-Sullivan, NE cor. SW NW, Section 30-5s-6e, is drilling at 225 feet. Magnolia Petroleum Co.'s No. 3 Rutland, SE cor. NW, Section 30-5s-6, is drilling at 565 feet. Bilbo Oil Corp.'s No. 14 Talefeno, NW cor. SE SE, Section 14-5-5, has been completed for 30 bbls. in sand 610-21 feet after plugging back from 738 feet. Flemming and others' No. 7 Null, SW cor. NE NW, Section 24-5s-5e, has been abandoned at 1,375 feet. Merrick and others' No. 21 Null, NE cor. SE NW, Section 24-5s-5e, made 20 bbls. in sand 672-86 feet, total depth 694 feet. No. 22 Null, NW cor. SE NW, Section 24-5-5, has been completed for 3 bbls. in sand 606-17 feet, total depth 629 feet. Reynolds and others' No. 1 Gliff, NW cor. SE, Section 26-5s-5e, has been abandoned at 600 feet. Bilbo Oil Trust Co.'s No. 5 Davis-Sullivan, NE cor. SW NW, Section 30-5s-6e, made 75 bbls. in sand 655-66 feet. Goddard Oil Co.'s No. 4 Marshall, NE cor. SW, Section 30-5s-6, has been completed for 18 bbls. in sand 603-31 feet, after plugging back from 706 feet. Westheimer and others' No. 7 Davis-Sullivan, SE cor. SW SW NW, Section 30-5s-6, has been completed for 70 bbls. in sand 632-51 feet, total depth 653 feet.

Cleveland County

Continental Oil Co.'s No. 3 Sudik, NW cor. NE NE, Section 6-10-2w, Oklahoma City Pool, has been completed for 25,800 bbls. in Wilcox sand 6,603-92 feet. Cromwell-Franklin Oil Co.'s No. 1 Reynolds, NE cor. SW, Section 6-10-2w, has been abandoned at 4,681 feet.

Hughes County

Transcontinental Oil Co. has the cellar dug for No. 1 Eason, NW cor. SW SW, Section 6-9-11. Magnolia Petroleum Co. made location for No. 1 Kiker, SW cor. NW SE, Section 8-7-8. Location has also been staked for No. 2 Jackson, NE cor. SW NE, Section 17-7-8. Independent Oil & Gas Co. and others' No. 1 Neal, NE cor. NW, Section 25-9-9, is dry and abandoned at 3,539 feet. Iglehart and others' No. 2-B Brooks, C NW SW, Section 28-9-10, has been completed for 5,000,000 feet of gas in sand 3,095-3,115 feet.

Oklahoma County

Russell Petroleum Co. has the rig up for No. 1 Fee, NE cor. NW NW NE, Section 2-11-3w, Oklahoma City Pool. Wirt Franklin Petroleum Corp. has the cellar dug for No. 2 Shahan, SW cor., Section 2-11-3w. Phillips Petroleum Co. made location for No. 1 Hankins, SW cor. NE SW NE, Section 2-11-3w. Morgan Royalty Co. has built the rig for No. 1 Stout, NW cor. SE NW, Section 2-11-3w. Thomas B. Slick's No. 1 Foote-Briscoe, NE cor. SW SE SW, Section 2-11-3w, is a cellar. Empire Oil & Refining Co.'s No. 1 Fee, SW cor. SE NE NW, Section 3-11-3w, is a cellar. Phillips Petroleum Co. staked location for No. 1 Patterson, SE cor. SW NE, Section 10-11-3w, Block 19, Lots 3 and 4, Patterson Addition. The cellar has been dug for No. 1 Clayton, NE cor. SW, Section 10-11-3w, Location has been made for No. 1 King, NW cor. NE NW, Section 10-11-3w. Skelly Oil Co. has dug the cellar for No. 1 Fields, SE cor. SW NE NE, Section 10-11-3w. Indian Territory Illuminating Oil Co.'s No. 3 View Point, NW cor. SW SE, Section 10-11-3w, is a cellar. Indian Territory Illuminating Oil Co. and others' No. 1 M.K.&T., SE cor. SW, Section 35-12-3w, has been completed for 4,317 bbls. in sand 6,280-6,555 feet. Phillips Petroleum Co.'s No. 1 Jones, SW cor. NE NE SW, Section 1-11-3w, has been completed for 6,075 bbls. in sand 6,340-6,444 feet. Thomas B. Slick and Atkinson's No. 1 Baker, NW cor., Section 1-11-3w, made 2,100 bbls. in sand 6,270-6,385 feet. No. 2 Milner, CNL SE SW NW, Section 1-11-3w, topped Arbuckle lime at 6,492 feet, drilled to 6,501 feet and flowed 12,886 bbls. Thomas B. Slick and others' No. 1 Classen, NW cor. SE NW, Section 2-11-3w, made 2,568 bbls. in sand 6,445-6,608 feet. Wirt Franklin Petroleum Corp.'s No. 1 Holder, SE cor. SW, Section 2-11-3w, made 1,307 bbls. at 6,550 feet after plugging back from 6,588 feet. Indian Territory Illuminating Oil Co.'s No. 1 Coppinger, NE cor. NW, Section 11-11-3w, produced 10,010 bbls. from sand 6,350-6,600 feet. Indian Territory Illuminating Oil Co. and others' No. 1 Corff, SE cor. SW, Section 11-11-3w, has been completed for 2,701 bbls. in sand 6,270-6,532 feet. Cromwell-Franklin Oil Co.'s No. 23 Trosper Park, SE cor. NW, Section 12-11-3w, made 14,623 bbls. from sand 6,277-6,320 feet. Indian Territory Illuminating Oil Co.'s No. 2 Hugh Trosper, NE cor. SW NE, Section 14-11-3w, flowed 14,720 bbls. from sand 6,410-6,515 feet. Indian Territory Illuminating Oil Co. and others' No. 3 Hugh Trosper, NE cor. NW NE, Section 14-11-3w, has been completed for 7,002 bbls. in sand 6,450-6,540 feet. Thomas B. Slick and Indian Territory Illuminating Oil Co.'s No. 1 Huddleston, SE cor. SW NW, Section 14-11-3w, made 2,456 bbls. in sand 6,350-86 feet. Coline Oil Co.'s No. 13 Clauer, NE cor. NW SE, Section 25-11-3w, has been completed for 981 bbls. in sand 6,395-6,418 feet. Indian Territory Illuminating Oil Co. and others' No. 5 Peterson, NW cor. NE SW, Section 25-11-3w, had sand 6,370-6,606 feet total depth, and produced 4,078 bbls. Indian Territory Illuminating Oil Co.'s No. 13 Jones, SW cor. NW, Section 31-11-2w, flowed 36,186 bbls. from sand 6,470-6,607 feet. Sinclair Oil & Gas Co.'s No. 2 School Land No. 67, SE cor. NE SE, Section 36-11-3w, has been drilled to 6,758 feet in Wilcox sand topped at 6,725 feet, then plugged back to 6,733 feet and completed for 520 bbls. No. 12 School Land No. 54, SW cor. SE NE, Section 36-11-3w, made 36,030 bbls. in sand 6,570-6,658 feet. The Prairie Oil & Gas Co.'s No. 4 Hiddleston, NW cor. SE, Section 19-11-2w, has been completed for 350 bbls. in sand 6,300-29 feet.

Osage County

Winona Oil Co. moved a machine in for No. 17, NE cor. SW NE, Section 20-29-9. Ira L. Keith and others' No. 4, NE cor. SW SW SE, Section 3-23-8, is a machine rigging up. Turman Oil Co. has the rig up for No. 1, SW cor. NW, Section 11-21-8. F. A. Gillespie & Sons' No. 18, CWL E half W half NE, Section 8-20-12, is an old well rigging up to deepen from 1,502 feet. Winona Oil Co.'s No. 16, CEL NE, Section 20-29-9, has been completed for 10 bbls. in Peru sand 1,507-36 feet. Indian Territory Illuminating Oil Co.'s No. 433, NW cor. SE NE, Section 6-26-12, made 3,000,000 feet of gas in chat 1,598-1,632 feet. Peters and others' No. 1, SE cor. NW, Section 21-23-7, is dry and abandoned at 3,080 feet in Silicious lime.

Pottawatomie County

L. C. Milburn and others' rig is up for No. 1-A Day, SW cor. NW NW, Section 21-9-5. Wilcox Oil & Gas Co.'s No. 3 Warren, NE cor. NW SW, Section 23-6-3, has been completed for 2,407 bbls. in sand 3,508-32 feet. Indian Territory Illuminating Oil Co.'s No. 3 Davidson, SE cor. SW NW, Section 23-6-3, West Asher Pool, made 1,851 bbls. from sand 3,477-97 feet. Payne and others' No. 3 Bullock, SW cor. SE NE, Section 22-6-3, flowed 3,944 bbls. from sand 3,536-70 feet.

Muskogee County

Bryan Petroleum Co.'s No. 2 Simmons, CSL NE SE, Section 4-15-15, is an old well preparing to deepen from 1,606 feet. Berry and others' No. 1 Taylor, C NE NW, Section 32-12-19, is a machine. Dunbarr and others' No. 1 Shatley, C NE NW, Section 5-11-19, is drilling at 300 feet. Mack Drilling Co.'s No. 5 Richards, SE cor. NE NW NE, Section 33-16-15, has been completed for 30 bbls. in sand 1,487-1,527 feet. Boyle's No. 1-A Howard, SE cor. NW SE, Section 19-15-16, has been completed for 30 bbls. in sand 1,237-56 feet. Beland Oil Co.'s No. 9 James, CSL NE SE, Section 18-14-17, has been abandoned at 1,516 feet. Lyon and others' No. 1 Dean, NW cor. SE NE, Section 23-14-17, has been completed for 750,000 feet of gas in sand 1,681-91 feet. Cosen and others' No. 1-A Jackson, SE cor. SW NW, Section 8-13-16, has been abandoned at 1,709 feet. Becker and others' No. 1 Mayes, CNL SE NE, Section 16-12-19e, has been abandoned at 620 feet.

Okfuskee County

McAdams and others' No. 7 Pincah, NE cor. SE NW, Section 1-10-11, is a location. Atlantic Oil Producing Co.'s No. 2 Fields, SW cor. NW NW, Section 13-10-11, is spudding. Wells and others' No. 2 Fields, NW cor. SW NW, Section 13-10-11e, is a location. Atlantic Oil Producing Co.'s No. 1 Jimboy, SE cor. NE NE, Section 11-11-10, has been completed for 30 bbls. in sand 3,267-69 feet, after plugging back to 3,215-41 feet. Transcontinental Oil Co.'s No. 1 Tiger, SE cor. NE NE, Section 26-10-10, has been abandoned in sand 3,619 feet. McAdamas' No. 6 Pincham, C SE NW, Section 1-10-11, has been completed for 50 bbls. in sand 1,683-93 feet. Wells and others' No. 1 Stillwell, SE cor. NE NE, Section 14-10-11, has been completed for 40 bbls. in sand 2,168-80 feet.

Okmulgee County

Claypool and others' No. 1-A Banks, SE cor., Section 5-13-12, is a rig. Morrow and others' No. 1-A West, CNL NE SE, Section 26-12-12, has been abandoned in sand 810 feet.

Payne County

Transcontinental Oil Co.'s No. 1 School Land, SW cor. NW SW, Section 16-19-5e, is a location. Twin State Oil Co.'s No. 1 Massie, SE cor. NE SE, Section 17-19-5e, is spudding. The Prairie Oil & Gas Co.'s No. 1 Finnell, C SE SW, Section 5-19-1w, has been abandoned at 4,955 feet.

Pittsburg County

Cannady's No. 1 Smith, NW cor., Section 14-8-14e, is a rig on ground. Apex Oil Co.'s No. 1 Walker, NW cor. SE, Section 18-7-13, is spudding. Cities Service Co.'s No. 1 Featherstone, C NW SE, Section 9-6-17e, is a rig on ground.

Pontotoc County

Benedum and others' No. 9 Mole, NW cor. NE, Section 31-5-5e, has been completed for 230 bbls. in sand 2,443-2,630 feet. Benedum and others' No. 3 Browall, SW cor. NE NW, Section 31-5-5e, has been completed for 70 bbls. in sand 2,466-2,636 feet. Benedum and others' No. 1 Burke, NE cor. NW NW, Section 33-5-5e, has been completed for 110 bbls. in sand 2,357 feet.

Roger Mills County

Richfield Oil & Refining Co.'s No. 1 Hiatt, SE cor., Section 10-13-21w, is a location. Rook and others' No. 1 Davis, C NW NE, Section 4-11-26w, has been abandoned in sand 2,840 feet.

Stephens County

Taylor and others' No. 7 Skelton, NE cor. SW SW, Section 32-1s-7w, is a rig. Heyrick and others' No. 1 Andrews, SW cor. NW SW SW, Section 5-2s-7w, is a rig. Pace and others' No. 1 Dilly, CNL NE NW SW, Section 27-2s-7w, is a location.

Seminole County

Atlantic Oil Producing Co.'s No. 1 Fixico, NW cor. SE, Section 15-11-8, is a location. Mid-Continent Petroleum Corp.'s No. 7 Harjo, NW cor. SE SW, Section 20-6-6, is a cellar. Gypsy Oil Co.'s No. 3 Coker, SE cor. NE SW, Section 2-8-5, has been completed for 1,720 bbls. in sand 4,192-4,208 feet. Carter Oil Co.'s No. 5 Coker, SW cor. NE SW, Section 2-8-5, has been completed for 1,368 bbls. in sand 4,193-4,201 feet. Ligon and others' No. 1, Block 10, Lot 1, Wewoka, SW cor. NE NE, Section 30-8-8, has been abandoned at 2,000 feet. The Texas Company's No. 4 Chilcoat, SW cor. NW, Section 4-7-7, has been completed in sand 3,193-3,210 feet for 710 bbls. Phillips and others' No. 4 Hyde, NE cor. SW NE, Section 20-6-6e, has been completed in sand 2,960-76 feet for 4,335 bbls. Gypsy Oil Co.'s No. 2 Harjo, NE cor. SW, Section 20-6-6, has been completed in sand 2,938-42 feet for 645 bbls. Sinclair Oil Co.'s No. 1 Caesar, NW cor. SE SW, Section 21-6-6, has been abandoned in sand 2,735 feet. Sinclair Oil Co.'s No. 2 Caesar, SW cor. SE SW, Section 21-6-6, has been completed for 2,000,000 feet of gas in sand 2,617-65 feet. Delaney and others' No. 1 Gilmore, NW cor. SE, Section 30-5-8, has been completed in sand 930-50 feet for 7 bbls.

Tulsa County

Boyd and others' No. 1-A Horn, NW cor. NE SW, Section 23-18-14e, has been abandoned in sand 1,368 feet.

Wagoner County

North's No. 4 Kanard, SW cor. NE SE, Section 31-18-17, has been completed in sand 952-59 feet for 5,597,640 feet of gas. Martin's No. 2 Drew, CEL NE SW, Section 26-18-15, is drilling at 700 feet.

PANHANDLE FIELDS

(Continued from Page 70)

feet, initial production 20 bbls., total depth 2,470 feet.

Jack County

Brazos River Oil & Gas Co.'s No. 2 Clopton, 22,000,000 feet of gas from 2,883-2,900 feet, total depth 2,900 feet. Butham Petroleum Co.'s No. 11 Jones, dry and abandoned, total depth 2,025 feet.

Montague County

The Texas Chief Oil & Gas Co.'s No. 1 Mitchell, dry and abandoned, total depth 2,000 feet.

Grayson County

C. E. Litchfield and others' No. 1 Coleman-Peters, dry and abandoned, total depth 1,800 feet.

Wichita County

R. R. Clark and others' No. 7 Bickley, oil show 847 feet, total depth 858 feet. George J. Proctor's No. 2 Hanover, oil show 842 feet, initial production 220 bbls., total depth 856 feet.

Young County

Consolidated Oil Co. of Texas' No. 1 Goathright, dry and abandoned, total depth 1,000 feet. Culberson Brothers' No. 1 Ward, dry and abandoned, total depth 700 feet. Elliott & Kliner's No. 1 Kirland, dry and abandoned, total depth 702 feet. F. P. Hynes and others' No. 1 Washburn, dry and abandoned, total depth 853 feet. Jacob Oil & Gas Co.'s No. 1 Goathright, dry and abandoned, total depth 845 feet. Junker & Perkin's No. 1 Stone, dry and abandoned, total depth 1,103 feet. E. B. Lawson's No. 1 Leberman, dry and abandoned, total depth 1,011 feet. L. A. Long's No. 1 Sims, dry and abandoned, total depth 890 feet. Baker & Pardue's No. 1 Donnell, dry and abandoned, total depth 3,340 feet. Rathke Oil Co.'s No. 1 Brown and Phillips, dry and abandoned, total depth 4,330 feet. Shaw Oil Corp.'s No. 2-B Kisinger, top pay 2,542 feet, initial production 400 bbls., total depth 2,566 feet. T. B. Slick's No. 2-C Morrison, dry and abandoned, total depth 3,859 feet. George Mollenkoph's No. 4 Larimore, dry and abandoned, total depth 728 feet. Panhandle Refining Co.'s No. 5 Larimore, dry and abandoned, total depth 735 feet. T. B. Slick's No. 1 Williamson, total depth 4,192 feet, plugged back to 3,880 feet, shot 120 quarts from 3,827-77 feet, initial production 50 bbls. A. H. Stolz' No. 1 Baldwin estate, dry and abandoned, total depth 757 feet. Westheimer and Daube's No. 1 Brock, dry and abandoned, total depth 1,153 feet. C. C. Williams' No. 1 Newman, dry and abandoned, total depth 555 feet. Williams and Lewis' No. 1 Lofton, dry and abandoned, total depth 603 feet.

A.P.I. MEETINGS ANNOUNCED

NEW YORK, Aug. 11.—Directors of the American Petroleum Institute and the general committees of the Divisions of Production, Refining and Marketing will meet at Tulsa October 2 and 3, prior to the opening of the International Petroleum Exposition. All sessions will be held in the Mayo Hotel. The general committee of the Division of Production will meet the morning of October 2 and the general committee of the Division of Marketing the afternoon of the same day. The general committee of the Division of Refining will meet the morning of October 3 and the board of directors will meet in the afternoon.

COMBINE STABILIZER AND RECOVERY PLANT

(Continued from Page 38)

on samples drawn simultaneously during a test run:

A.S.T.M. DISTILLATION TESTS

	Unstabilized P.D.	Stabilized P.D.
Gravity	55.4	49.5
Initial	90°F.	128°F.
10	160	197
20	188	232
30	252	260
40	278	286
50	309	310
60	335	338
70	364	364
80	408	392
90	476	430
Endpoint	502	510
Residue	1.5%	1.5%
Recovery	92.0%	98.5%
Loss	6.5%	None

A further check of the effectiveness of the stabilization or debutanization process is shown by the results of low temperature fractionation tests run on these same samples.

LOW TEMPERATURE FRACTIONATION OF STABILIZED AND UNSTABILIZED P.D. RESULTS SHOWN AS PERCENTAGES

	Unstabilized P.D.	Stabilized P.D.
Methane	0.0	0.0
Ethane	1.07	0.0
Propane	2.38	0.0
Iso-butane	1.55	0.0
Butane	5.83	.21
Iso-pentane	4.68	} 5.40
Pentane	4.00	}
Hexane	9.37	7.39
Heptane and heavier	71.12	87.00

Based on the results shown in the foregoing table the P.D. may be termed almost butane free and a reduction in the content of all of the hydrocarbons lighter than heptane may be seen as a result of stabilizing also.

Sulphur Content High

The sulphur content of the raw P.D. ranges between 0.350 and 0.450 per cent, which is relatively high but is accounted for by the high sulphur content of the Pecos crude. The sulphur content of the stabilized P.D. is approximately the same and usually is a little higher than the unstabilized, due to the volume shrinkage during debutanization. The stabilized P.D. is free of hydrogen sulphide and the very light mercaptans but the removal of these is generally more than equalized in the volume change.

Gasoline Recovery System

The gasoline recovery system includes the equipment of the conventional absorption plant but in addition is capable of producing a light gasoline of very definite specifications and the operation of the unit is flexible enough to permit the manufacture of specialties. The product made at present is much more volatile than ordinary natural gasoline, however, it is being used as a blending stock with refinery gasolines in much the same manner as natural gasoline. An A.S.T.M. distillation test of this material shows the following results:

DISTILLATION TEST ON REFINERY NATURAL GASOLINE

Gravity	97 3
Initial	58°F.
10%	60
20	61
30	64
40	68
50	73
60	84
70	107
80	292
Endpoint	292
Recovery	80.0%
Loss	18 2%

The low temperature fractional analysis indicates this material to approximate 60 per cent butanes, the exact quantitative results being tabulated below:

COMPOSITION OF REFINERY NATURAL GASOLINE ACCORDING TO LOW TEMPERATURE FRACTIONATION

Methane	0.0%
Ethane	0.0
Propane	0.0
Iso-butane and normal butane	60.00
Iso-pentane and normal pentane	31.76
Hexane	8.24

This product is given a light caustic wash and then a doctor treatment, using 16 gravity caustic and then water washed. Apparently the raw material contains a large amount of easily removed light mercaptans for the doctor treatment reduces the sulphur content of the raw gasoline from an average of .3 per cent to an average of .05 per cent. A picture of the continuous treater through which this gasoline is processed is shown here.

The finished gasoline is now being stored in steel tanks under 20 pounds pressure.

Residue Gas

The other product of the gasoline recovery system is the residue gas and at present this is being used as fuel under the stills and boilers, but will soon be released to the local gas distributing company for general use. This gas is practically dry and a low temperature fractional analysis shows it to have the following composition expressed in percentages:

Methane (including H_2S)	46 36%
Ethane	31.27
Propane	21.07
Iso-butane	1.30
Butane	0.0

The above results are distorted by including the effect of the presence of hydrogen sulphide which represents from 5 to 6 per cent of the total residue gas by volume. This will be removed by scrubbers when the gas is sold for general distribution and the ratio of the components of the treated gas will be correspondingly adjusted.

Operating Recovery Plant

The operation of the gasoline recovery plant is very much like that of the conventional modern absorption type of natural gasoline plant wherein the incoming gases are compressed, cooled and passed through an absorption tower countercurrent to a mineral seal oil, whereby the gasoline is extracted from the vapors. This procedure is more clearly shown in the accompanying flow chart. When referring to the chart, however, the vapors are seen to enter the system at two principal points, namely, through the gas scrubber on the suction side of the compressor and also in the top of the rich gas scrubber on the compression side. This is accounted for in that the absorption system is maintained under 40 pounds pressure and the vapors coming from the topping stills must be compressed to that pressure for processing while the vapors from the pressure stills and the light gasoline vapors from the stabilizing plant are already at 45 pounds pressure.

Use Gas Holder

The supply of gas to the system is partly stabilized by running the vapors from the topping unit to a 500,000-foot gas holder from which they are withdrawn for processing through the recovery plant. The compressors handling these vapors have a capacity of 1,000,000 feet a day. The vapors leave the compressors at 45 pounds pressure and at 160° F. They are then cooled to 75° F. after passing through water-sprayed coils. These vapors then enter the rich gas scrubber and mix with the vapors from the stabilizing unit.

From this scrubber the vapors pass into the bottom section of the absorber and the gasoline is extracted by the lean oil. The unabsorbed vapors or gases pass off the top as residue gas while the enriched oil is continuously withdrawn from the bottom of the absorber.

It is then run through a heat exchanger where it takes up heat from the lean oil coming from the evaporator and then the rich oil goes to a surge tank. From here it passes through another exchanger where it absorbs additional heat from the lean oil from the evaporator and there it is sprayed into the top of the evaporator.

The evaporator contains a series of steam coils capable of maintaining a temperature of 320° F. in the evaporator. The gasoline vapors leave the evaporator at 265° F. while the lean oil is withdrawn continuously from the bottom and recycled. The vapors then enter the dephlegmator where they are cooled to 190° F. by passing over water-cooled, closed coils. This condenses out any trace of the absorption oil which may have been carried over mechanically. This is returned to the evaporator.

The vapors leaving the dephlegmator are then cooled to 75° F. by passing through a series of cooling coils. Condensation takes place in these coils and the gasoline is run to a make tank from which it is continuously pumped to the fractionating unit.

Fractionating Unit

The feed pump for the fractionating unit continuously withdraws the gasoline from this tank and forces it through a heat exchanger supplied with heat by the stabilized gasoline from the kettle. The heated gasoline is then sprayed into the fractionator near its midsection.

This fractionator is a long column of small diameter on the top of which is a condenser cooled by water and the base sets over a steam-heated kettle. This permits a great amount of flexibility, but at present is being operated so a temperature of 112° F. is maintained in the top vapor section and 190° F. in the kettle.

The gases which leave the tower go to the residue fuel line while the stabilized refinery natural gasoline, which is continuously withdrawn from the kettle, is cooled by a water exchanger and run to pressure storage for blending.

General Operating Data

Although the data included here are the results obtained on a test run, the plant was operating on a normal basis and handled an average of 3,091,000 feet of rich gas daily and 4,500 bbls. of pressure distillate. The vapors entering the absorber showed a gasoline content of 7.5 to 8 gallons per 1,000 feet, and on a low temperature fractional distillation showed the following composition:

COMPOSITION OF RICH GASES TO ABSORBER—EXPRESSED AS PERCENTAGES

	Rich Gas	Residue Gas
Methane	28.74	46.36
Ethane	22 00	31.27
Propane	23.66	21.07
Iso-butane and normal butane	17.64	1.30
Iso-pentane, pentane and heavier	7.96	0.0

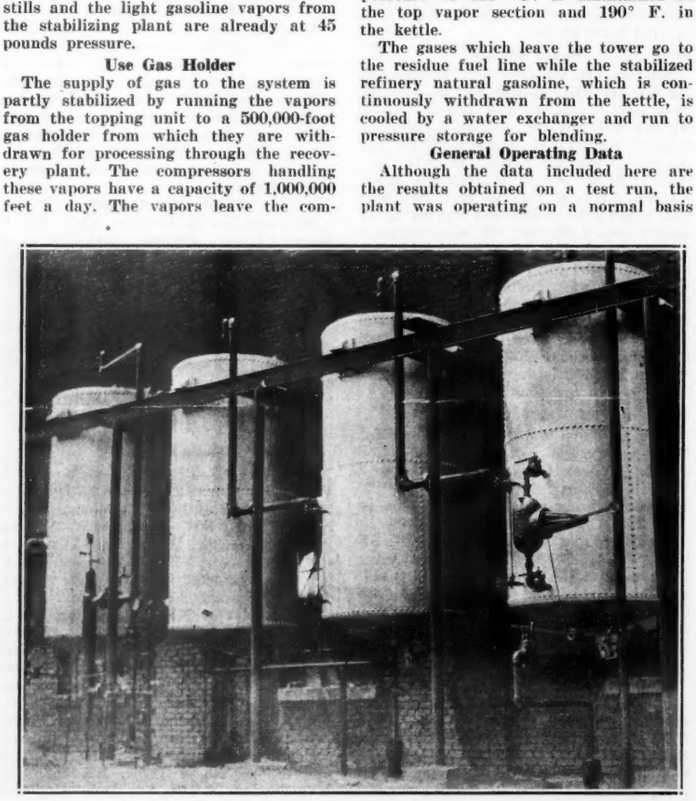
For convenience in comparing the effectiveness of the recovery system, the composition of the residue gas is repeated above.

Steam Consumption

Operating at the rate previously mentioned the steam consumption was recorded at 11,100 pounds per hour and the water consumption at 57,000 gallons per hour.

Of the 3,091,000 feet of total vapors processed, 1,438,000 feet of residue gases were recovered from the system as fuel.

The unit was built by Whealton & Townsend, Inc., of Tulsa.



New treating plant for handling light gasoline from recovery system. Note orific mixing columns on first two separators for caustic wash and doctor treatment. Between these is a sulphur drum through which a portion of the stream is diverted and this eliminates adding the sulphur by hand.

MAY ANNOUNCE MERGER PLANS ON SEPTEMBER 17

(Continued from Page 37)

be undertaken by the merged Sinclair group will be the entry of the company into the gasoline pipe line industry on a broad scale. Some reports have it that the Sinclair corporation, following the absorption of Prairie and Tide Water-Associated, will enter into negotiations with one or more other major independent companies, looking to the strengthening of its position in some sections of the country, and that these negotiations will include at least one company which is already active in the construction of one or more gasoline pipe lines. These reports, however, are still to be classed as rumors.

Believed Plans Completed

Judged by the current situation and the departure at this time of Mr. Sinclair to Europe, where he will remain until his return for the meeting of stockholders in the middle of September, it is believed here that final arrangements for the consolidation of Sinclair, Prairie Oil & Gas, Prairie Pipe Line and Tide Water-Associated have been made, and that ratification of the proposed consolidation will be asked immediately following the approval by Sinclair stockholders of the sale of the Crude Oil Purchasing and Sinclair Pipe Line properties to Standard Oil Co. of Indiana.

Eastern oil interests, in some instances, have been rather skeptical concerning the inclusion of Tide Water-Associated in the Sinclair combine, basing this skepticism on the theory that Sinclair and Tide Water facilities duplicate in the East, and that there would be no real benefit to the Sinclair organization in acquiring Tide Water-Associated's eastern properties. A close study of the situation, however, shows that there is actually little real duplication of facilities of the two companies, but that bulk and retail facilities actually complement one another in a most favorable way.

Sinclair's California plans, it now appears rather definitely, have eliminated entirely the possibility of the inclusion of Richfield of California in the merged Sinclair group, with Associated already reported in the fold. While the Sinclair organization, lacking Associated, could fit Richfield's California properties into its operations very nicely, the eastern marketing properties of Richfield duplicate Sinclair's Atlantic Coast outlets very closely. It has been reported the Rio Grande Oil Co. of California would be included in the merger.

While the entire Sinclair expansion program is still unofficial, usually well-posted oil and financial interests here have stopped guessing who will be in the combine, and instead are speculating as to when the Sinclair-Prairie-Tide Water-Associated consolidation will be made public.

One Good Gas Well in Eastern Fields

City of Lancaster's Second Completion in Pleasants Township, Fairfield County, Has Estimated Flow of 5,000,000 Feet

By Special Correspondent

PITTSBURGH, Pa., Aug. 11.—One good gas well in Southeast Ohio featured completions in the eastern field in the last week. In Fairfield County, the NE of Section 23, Pleasants Township, the city of Lancaster completed its second well on the Henry Hartman farm to the Clinton sand at 3,254 feet and it is a gasser estimated at 5,000,000 feet a day.

The number of completions in the eastern fields was small owing to the continued drought and hot weather. The East has been without rain for so long that statisticians are beginning to check over their records. Wells in the gas areas of West Virginia are shut down within a few hundred feet of the sand waiting on water.

Besides the city of Lancaster's well there were 12 other completions reported from other sections in Southeast Ohio, none large, but all producers. In Coshocton County, Lot 4, Bethlehem Township, O. E. Stoan and others completed their No. 13 on the Adams and Mayers farm to the Berea at 1,077 feet, and it will make about 10 bbls. a day initial.

In Licking County the Edward H. Everett Co. completed its No. 4 on the D. O. Flenner farm, Section 13, Hanover Township, and it was drilled to the Clinton sand at 2,902 feet and after shot produced 60 bbls. the first day. In the SW of Section 15 of this township, the Hope Construction & Refining Co. completed its No. 3 on the Edward Hickey farm to the Clinton sand at 3,064 feet, and it is showing for a light producer.

Two Wells in Medina County

In Medina County the Oko Oil & Gas Co. continued its shallow sand operations with two added wells. The first, its No. 31, and in Lot 1, Section 2, Chatham Township, on the Jessie McVicker farm, was completed in the Cow Run sand at 440 feet and after being shot produced 10 bbls. the first 24 hours. The other, No. 38, in the same township, Lot 2, Section 13, on the Henry Essing farm, was drilled and shot in the Mitchell sand at 284 feet and it produced 40 bbls. the first day.

In Monroe County there was only one completion and it was an old abandoned well drilled deeper from the Keener sand to the Squaw sand. Lois A. Timblin and others completed this old test well on the C. J. Bode farm, Section 35, Bethel Township, and it made 5 bbls. natural the first day.

Muskingum County had one additional completion. It was the test of the Pure Oil Co. on the F. H. McKee farm, SE of Section 6, Jackson Township, and was drilled and shot in the Clinton sand at 3,114 feet, producing 47 bbls. the first 24 hours.

In Perry County the Arnold Oil & Gas Co. completed its test on the F. W. Arnold farm in the NE of Section 16, Reading Township, to the Clinton sand at 2,960 feet, and it is a gasser good for a quarter of a million feet.

Washington County had three completions. In Section 33, Independence Township, Merlan Schramm and others drilled their No. 13 on the Ephram Cummons to the Mitchell sand at 284 feet and it produced 7 bbls. natural the first day. In the NW of Section 34, Aurelius Township, J. C. Garner and others completed their test on the J. A. Larcomb farm to the Berea grit at 1,710 feet and after shot it showed for a 2-bbl. pumper. In Section 7 of the same township, Donald E. Williams and others completed their No. 3 on the Nona Hutchins farm at 664 feet in the Macksburg 500-foot sand and it is also showing for a 2-bbl. pumper after shot.

In Section 7, Cambridge Township, Guernsey County, the Preston Oil Co. has rigged up for a test on the M. Johnson farm. In Section 30, Harrison Township, Perry County, the Ohio Fuel Gas Co. has spudded in and started drilling their No. 1 on the D. A. Alwine farm and in Section 4 of the same township, Henry Scholl and others have abandoned a location for a test on the George Brumage farm. In Muskingum County, the Preston Oil Co. has rigged up for a test on the John C. Hicks farm, Section 16, Perry Township. In Washington Township, of this county, Wilson Brothers have rigged up for a test on their own property. In Fallsbury Township, Section 13, Ridgeway and others have a rig ready for a test on the Walter McDonald farm. In Holmes County the Ohio Fuel Gas Co. is ready for their test on the A. H. Campbell farm, Section 12, Washington Township.

WEST VIRGINIA

Only such wells as were close to an unfailing source of water could be completed during the last week. All were gas wells but two and these two were failures. In Calhoun County, W. H. Bickel completed his No. 2 on the J. H. and J. C. Hayhurst farm in Center district to the Injun sand at 1,936 feet, and it is a fair gasser natural. In the same district the South Eastern Gas Co. completed its No. 4 J. M. Shanks farm to the Injun sand at 2,046 feet, and it is showing for a light gasser natural.

In Clay County, Henry district, the Thompson Gas Co. completed its T22 on the D. N. Schoonover farm at 2,121 feet in the Big Injun sand, and it is showing for a fair gasser. In Doddridge County, the Pittsburgh & West Virginia Gas Co. completed its No. 4,983 on the Rosa B. Rymer farm to the Big Injun sand at 2,502 feet and it is a light gas well. This is in Southwest district.

In Kanawha County the United Fuel Gas Co. completed its No. 4,261 on the James A. Wells farm in Louden district and it is a duster. The Clendenin Gas Co.'s deep test in Logan district, Logan County, and on the Boone County Coal Corp. tract reached 5,958 feet and is dry. In Mannington district, Marion County, the Philadelphia Gas Co. is continuing to drill deeper its old No. 1 on the William Snyder farm, and starting from 2,182 feet has reached 2,555 feet. The top of the Big Injun was found at 2,450 feet.

There were three completions in Roane County. The South East Gas Co. completed its test on the A. J. Boggs farm in Geary district to the Maxon at 1,642 feet, and it is showing for a good gas well natural. In Walton district the United Fuel Gas Co. drilled its No. 3,953 on the B. K. Littlepage deeper to 2,005 feet and has a fair gasser natural from the lower sand. In Geary district the Richard Elkins estate and others completed their No. 33 on the Smith farm at 2,174 feet and it is a small gas well natural.

Starting and Drilling Tests

In Grant district, Cabell County, the Harshberger Oil & Gas Co. is drilling at 510 feet in a test on the Walter W. Morris farm. In Barboursville district of that county Wilson and Mowery have a location ready for a test on the A. L. Baumgarden farm. In Calhoun County, Godfrey L. Cabot is rigging up for a test of the George Hunt farm in Washington district. In Sherman district the Mid Penn Oil Co. has a rig ready for a test on the Charles Poling farm. In Center district, W. H. Bickel has a location on the John D. Collins farm and a test. In Boone County the Hope Natural Gas Co. is building a rig on the C. P. Parker farm in Washington district.

In Kanawha County the Island Gas Co. is drilling at 400 feet its test on the Scott and Smith farm in Cabin Creek district. In the same county and Washington district, the Cambridge Gas Co. a location ready for a test on the Walter A. Compton farm. In Gilmer County, most of the wells are shut down for water, including those just starting, as McCall & Co. at 175 feet on the John Ralston farm in De Kalb district, F. G. Davis and others at 550 feet in their test on the Alva J. Hardman farm in the same district.

Lincoln County Active

Lincoln County is becoming active again with new work. In Carrol district the Allegheny Gas Corp. is drilling at 50 feet in its test on the George W. Lucas farm. In the same district the same company is drilling at 350 feet in its test on the M. B. Callister farm. In Sheridan district the Kanawha Gas & Utility Co. has taken a location for a test on the Jeff and Scott Ray farm, and in the same district the Martin Gas Co. is drilling at 600 feet its test on the Blach and Yeager Mineral Co. property. In Jefferson district, the Hamlin Drilling Co. has started drilling a test on the Richard Miller farm.

In Sandhill district, Marshall County, the Myers Oil Co. has a rig standing for a test on the C. M. Strickland farm. In Liberty district of this county the Twin Oak Oil & Gas Co. is rigging up for a test on the W. E. Parriot farm. In Marion County, Paw Paw district, Victor Tennant is drilling at 125 feet in his test on the Minnie S. Price farm.

In Roane County, F. F. McIntosh is building a rig on the A. J. Boggs farm in Geary district. In Curtis district, of this county, W. H. Heeter and others are rigging up for a test on the Robert Knopp farm, and in Spencer district Paul Weekley and others have a rig ready for their No. 1 Gay M. Spencer. In Geary district the United Carbon Co. has a location for a test on the Preston Helmick farm.

In Wetzel County the Manufacturers Light & Heat Co. is drilling at 100 feet in the test on the Mary C. Pethtel farm in Church district, and in Grant district the Shimwell Oil & Gas Co. is shut down at 3,053 feet with the tools in the hole in its test well on the W. J. Price farm. In Walker district, Wood County, the Four States Oil Co. has rigged up and shut down for water in its test on the John Roberts farm.

SOUTHWEST PENNSYLVANIA

After a period of activity, the Southwest Pennsylvania Field returned only one added completion the past week. This was the test well on the William Kent farm in Wayne Township, Greene County, which was drilled deeper by H. D. Freeland & Co. to the Bayard sand at 3,263 feet, and it made such a small showing of gas that it will be abandoned.

There is some new work going on in this field, but most of it has been delayed due to water conditions. In Greene County, Morris Township, Freeman & Behm have a fishing job at 950 feet in the test well on the Charles Tripp farm. In South Franklin Township, Washington County, the Natural Gas Co. of West Virginia has a rig standing on the S. A. Post farm. In Amwell Township of this county, J. Blaine Wise Co. has reached 900 feet in a test on the A. G. Blaine farm. In the same county the Manufacturers Light & Heat Co. has two rigs standing, one for their No. 3,436 on the L. A. Ames farm in North Bethel Township and the other on the Robert Daley farm in East Finley Township.

DRILLING PLAY IN TENNESSEE IS FORESHADOWED BY NEW GAS LINE

By George A. Whitney

NASHVILLE, Tenn., Aug. 11.—The long drouth in Tennessee has retarded development work in the last few weeks and several rigs are down owing to lack of water. The curtailment of new drilling for oil in states nearby has had a reaction in Tennessee and operators have turned their attention to this State in hope of developing a gas field. Entry of the Missouri-Kansas Pipe Line Co. with its two operating subsidiaries and the extensions of its Kentucky pipe lines through Lafayette, Hartsville, Old Hickory, and on into Nashville will provide a ready market for all gas that may be produced in the counties bordering Kentucky. The company had a crew of surveyors in Red Boiling Springs and other towns last week and pipe laying is expected to follow.

Barney Calvert, a contractor, and the Armistead Oil Co., of Duluth and Owensboro, are working in conjunction with the Missouri-Kansas people and it is understood several tests will be drilled this fall around the big well of the Missouri-Kansas company, on Long Branch. These concerns have leased a large section of Macon and Clay Counties and also hold large blocks on Trace Creek around Spivy, 6 miles east of Red Boiling Springs.

A scout for a large company is said to be taking up a block of leases around Hartsville, where two or three large gas wells were drilled several years ago when Allen County, Kentucky, was on a boom. These wells were plugged, but they are said to be seeping gas through the plugs. Leasing is being conducted in various parts of the northern section and the fact that nearly every well drilled on structure during the past 10 years had more or less gas is expected to result in new wells being drilled. The Chattanooga shale outcrops over this entire area.

Well Started Near Crawford

A new well has been spudded in on the Briar Hill Collieries Co.'s lands near Crawford, in Overton County, and is now about 600 feet in depth. The location was made by Stuart St. Clair, geologist of New York, who is understood to be associated with the Southeastern gas interests. The same persons are drilling at 1,500 feet near Sparta, and also at 1,700 feet on a deep test 6 miles south of McMinnville. The wells have been shut down two or three weeks on account of water. J. V. McGuire picked up a gas sand at 250 feet in his well north of Winchester, Franklin County, making about 200,000 feet, but will drill it to the sand where a good well was found several years ago at same town. The depth of the old well is about 800 feet. McGuire is drilling at 325 feet in his well 12 miles north of Manchester, along the Nashville Pike, in Coffee County.

Nothing of interest has been reported from the operations of the Chattanooga Gas Co. around Fayetteville, in Lincoln County, where they are running two

(Continued on Page 157)

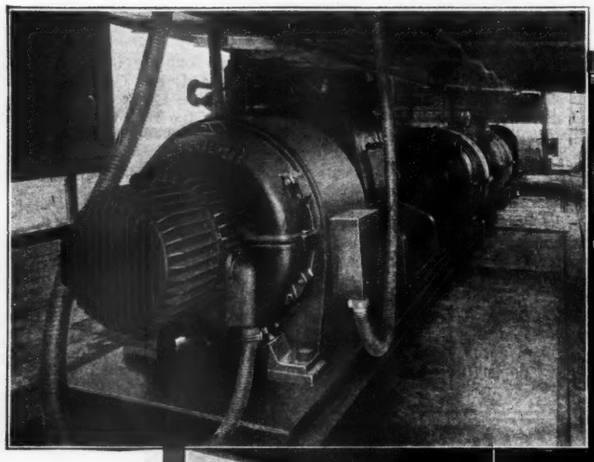
World's LARGEST

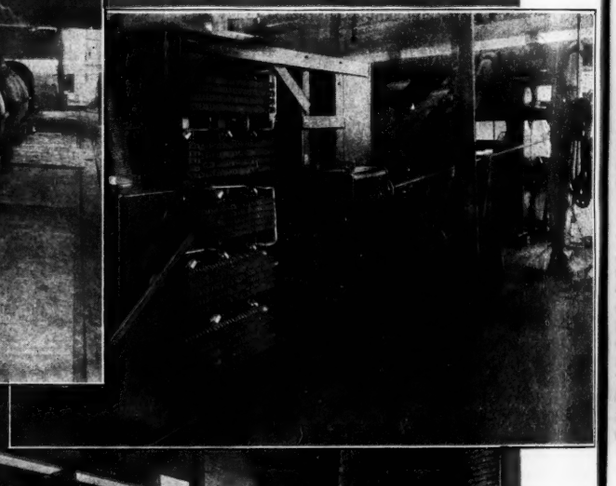
750 H.P. in Electric Motors used by Hall & Brisco in drilling Lindsay No. 2 Well, Oklahoma City.

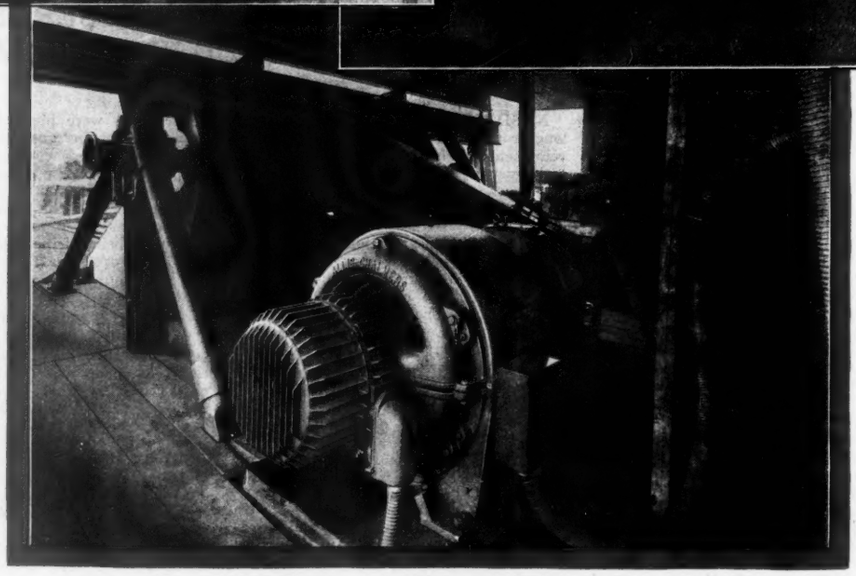
Three 250 h.p. protected type Allis-Chalmers motors supply the power for the largest electric drilling rig in the world. One 250/85 h.p. motor operates the drawworks. The 250 h.p. is used for and is ample for rapidly hoisting the heaviest strings of pipe. The 85 h.p. rating is used for rotating and gives close speed regulation and high efficiency for the low power, long time jobs. The 85 h.p. rating also reduces materially the liability of twist-offs. Two 250 h.p. motors operate 7¾x18 Lucey slush pumps.*

On the completion of Lindsay No. 2 hole the equipment was moved to another location. Duplicate equipments are now being used on Mueller No. 2 and other wells in the Oklahoma City Field.

These motors, together with their control, have brought out as never before the rapidity, flexibility, and economy possible with electric drilling rigs.







AC

ALLIS-CHALMERS MANUFACTURING CO.

* *The steel derrick on this location blew over in a high wind storm falling on the motor and control. The equipment was not damaged owing to the heavy construction and extensive use of steel and was placed back in service immediately after a new derrick was erected.*

Electric Drilling Rig ---

Features of Motor:

Welded steel frame — Box type for protection against splash with unimpaired ventilation.

Enclosed, externally mounted slip rings.

Split bearings and housings.

Star Delta connections — 85 h.p. for economical drilling — 250 h.p. for heavy and rapid hoisting.

Special insulation.

Exceptionally high pull-out torque.

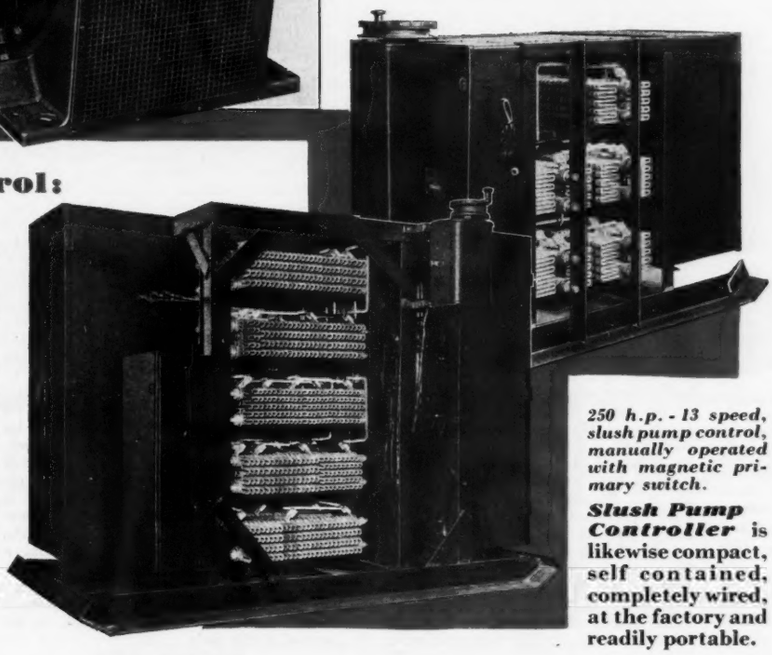
Features of Control:

Magnetic Drilling Controller with Time Delay Acceleration. Time limit overload protection on both 250 and 85 h.p. ratings.

Self contained and assembled as a unit with all connections and wiring finished at the factory. Compact and readily portable as a unit by disconnecting line and motor leads.

Frame and skids of structural steel, cross braced and welded.

250/85 h.p. - Star Delta - 8 speed reversing master operated Rotary Drilling Control



250 h.p. - 13 speed, slush pump control, manually operated with magnetic primary switch.

Slush Pump Controller is likewise compact, self contained, completely wired, at the factory and readily portable.

ALLIS-CHALMERS

Allis-Chalmers Manufacturing Company, Milwaukee

Two Ohio Wildcats May Stir Drilling

Completions in Henry and Wyandot Counties Believed to Add to Territory Where Small Oil and Gas Wells May Be Found

By George A. Whitney
Staff Correspondent, Central West Fields

FINDLAY, Ohio, Aug. 11.—Test work continues in the Central West Field, especially in the Central Ohio division and in the old Lima Field. Two wildcat wells completed since the last field review will encourage the starting of new development in two counties. The Henry County Oil & Gas Co. found a fair volume of gas in a test on the D. J. Creager farm, Section 27, Damascus Township, Henry County, to the west of the old Wood County Field, the gas being found at 1,800 feet. The other test was drilled by Coyle & Jones on the Charles H. Bell farm in Tymochtee Township, Wyandot County. It is reported showing a volume of 300,000 feet. The Henry County well is on the west and north side of the old Trenton Rock Field proper, while the Wyandot County well is on the east and south side, adding territory where it is believed small oil and gas wells can be found in the future. The Wyandot County well found its gas at 1,423-42 feet in the Trenton lime formation.

In the Cessna Township Field of Hardin County, the Ohio Fuel Gas Co. developed a fair gas well in No. 3-5,219 on the Parker A. Robinson farm, Section 14.

Northeast of Lima, in Bath Township, Allen County, Roalman & Peak's No. 4 well, 250 feet from the south line and 600 from the west line of the Nancy E. Leedy, N half Section 14, pumped 40 bbls. initial at 1,362 feet, and C. A. and F. J. Peavy's No. 5 well, 250 feet from the north line and 750 from the east line of the C. A. Hoover farm, Section 24, same township, pumped 10 bbls. at a depth of 1,374 feet, or 36 feet in the Trenton.

CENTRAL OHIO

Twenty completions were reported from the Central Ohio Field during the week, of which six were producers with an initial production of 180 bbls., 7 dry holes and 7 gas wells. Five locations were made and 16 wells started spudding. Scarcity of water over the field has affected active work.

In Ashland County, Lake Township, Robinson and others made an initial oil strike for 25 bbls. in No. 5 on the W. S. Wolfe farm, Section 6, from the Berea sand at a depth of 638 to 709 feet. No. 6, same farm, is drilling and the same operators are starting No. 3 C. I. Sellers, Section 9. I. E. O'Hail is drilling No. 2 Thomas Doup farm, Section 31, Hanover Township, same county.

In Lorain County, Wiser Oil Co. found a dry hole in No. 1 A. and M. Baus farm, Lot 69, Amherst Township, there being no sand showings.

In Wayne County, M. and S. Burtner's No. 3 E. Stone farm, Section 4, was a duster at a depth of 3,392 feet.

In Knox County, Union Township, Harry G. Hammond's No. 7 on his own farm, Section 23, found the Berea sand dry from 607-37 feet.

In Coshocton County, Clark Township, the Ohio Oil Co.'s No. 4 on the Robert Rhodes, Section 6, reported with an initial of 60 bbls. from 3,507 to 3,568 feet.

In Summitt County, Green Township, East Ohio Gas Co. has a gas well in a second test on the F. S. Kiefer farm, Section 18, from 3,600-20 feet, and Witmer and others' No. 1 R. C. Witmer farm, Section 31, is a gas well from 4,093 to 4,118 feet.

In Licking County, Hanover Township, Hope Construction & Refining Co.'s second test on the Minor-Obannon farm, Section 13, showed an initial of 50 bbls. from 2,783 to 2,823 feet, McClay Brothers' No. 5 Emmett Hover farm, Section 3, Perry Township, pumped 2 bbls. from 2 bbls. from 700-09 feet. E. J. Edmonds is drilling a test on the Robert Stair, in the third-quarter section of Newton Township. In Fallsburg Township, McClay Brothers drilling No. 2 U. G. Porter, Section 13, and Morpell and others drilling No. 3 Walter McDonald, Section 12. In Hopewell Township the Wehrle Co. drilling No. 1 Orville Hartman, Section 7.

In Muskingum County, Newton Township, the Preston Oil Co. has a gas well in No. 1-1,424 B. F. Stakely farm, Section 34. Wehrle Co. drilling No. 1 Azariah A. Davis, Section 11, Salem Township.

In Athens County, Ames Township, Ohio Fuel Gas Co. has a gas well in No. 2-5,220 E. C. Jones farm, Section 4; also a gas well in No. 3-5,215 C. O. Grimes, Section 36, Berne Township. The depth of the Jones well was 1,428 feet and the Grimes hole, 1,585 feet. Same company brought in a gas well in No. 1-5,173 Emma Bean farm, Section 6, Lodi Township, in the Berea sand at a total depth of 1,774 feet. Gross & Freebault's second test on the E. Knowlton farm in fractional Section 25, Lee Township, was dry at 1,159 feet. Orange Gas Co.'s No. 12 Emery L. Chapman, Section 19, Carthage Township, was reported dry and full of water at 1,100 feet, which is the Maxon sand. Nuzum and others drilling No. 2 Elmer Halbert, Section 8, Cannan Township, same county.

In Tuscarawas County, Oxford Township, the Gordon Oil Co. has an initial 30-bbl. producer in No. 2 J. H. and L. Davis farm, Section 21, at 3,495 feet. Same company has a dry hole in No. 1 Daniel Kess, Jr., farm, Section 31, Washington Township, same county, at 3,554 feet. In Goshen Township the Federal Oil & Gas Co. has an average gas well at a test on the Lewis Reichman farm, Lot 42, at a total depth of 4,991 feet.

In Guernsey County, Wheeling Township, East Ohio Gas Co.'s No. 2 Oscar Quillan, Section 2, reported good for 8 bbls. at 3,473 feet.

In Belmont County, McBride and others have a dry hole in No. 2 Grant Hadsell farm, Section 1, Somerset Township at 1,430 feet.

INDIANA

Only three completions were reported from the Indiana fields, two being dry and one a gas well, all in the southwestern area in the Princeton Field. In the southern section of the State near the Ohio River and across the river from the rich Owensboro, Ky., Field, there are a few wells under way, most of the work in this area being in Spencer and Perry Counties.

One of the best gas strikes made in the Princeton area in the southwestern portion was made by Dr. C. C. Taliaferro, Jr., in a test on his own property in the NW of Section 29, Washington Township, Pike County, and 400 feet from the south line and 210 feet from the west line of the lease, which found a volume of 3,714,000 feet in 12 feet of sand from 1,078-90 feet. R. J. Rendal and others' No. 5 well, 700 feet from the south and east lines of the F. C. Chandler farm, SE Section 15, Logan Township, was dry at 1,069 feet. Blue Bird Oil Co. abandoned the No. 2 well on the M. Ingler farm, Section 22, same township.

The Indiana Oil & Gas Corp. drilled a test in the SE cor. of the Perry Colvin farm, NW Section 6, Washington Township, Gibson County, getting a duster at a total depth of 1,640 feet.

ILLINOIS

The Robinson Oil Co. made a deep test in a second test 1,200 feet from the north line and 200 feet from the east line of the Hattie E. Robinson farm, NE Section 15, Wabash Township, Wabash County, but got a duster at a total depth of 2,360 feet. No. 3, same farm, is drilling.

W. C. McBride, Inc., drilled a test 600 feet from the north and west lines of the D. E. Frye farm, SE Section 3, Montgomery Township, Crawford County, which produced 6 bbls. initial at 997 feet. Watson and others' No. 3 well, 1,100 feet from the south line and 660 feet from the west line of the Martin Newlin farm, NW Section 13, Prairie Township, same county, pumped but 2 bbls. in 24 hours at 879 feet.

Snowden-McSweeney Co. pulled out and abandoned old No. 3 on the J. R. Nuttall farm, NE Section 36, Petty Township, Lawrence County, which has been producing steadily for many years, or close around 1910.

Otto Karb abandoned his No. 1 on the Mable Fitzsimmons lot, in the town of Du Po, SE Section 21, Sugar Loaf Township, St. Clair County.

ALLEN COUNTY WELL EXPECTED TO REVIVE DRILLING IN THAT FIELD

By George A. Whitney

OWENSBORO, Ky., Aug. 11.—After several years of inactivity the old Scottsville Field of Allen County, which in its day was one of the outstanding shallow producing fields of the country, is again in the limelight and may see drilling for deeper pay sands. What is considered a new development for Allen County and Scottsville as well, is the recent bringing in of a well that is reported good for 200 bbls. by the Meely Oil Co., on the Taylor farm, about 5 miles to the north of Scottsville, the county seat of Allen County. It came in at a depth of 456 feet, approximately 100 feet deeper than the old-time production was found.

Operators at this time are not trying to rush field work on account of present conditions, and no great activity is looked for in the Scottsville area until later in the season when it is hoped that conditions will be back to normal. Little drilling is looked for in the Owensboro fields of western Kentucky. In that area on July 1 there were 2,081 oil wells turning out crude.

Ohio County

No large oil producers were found in the Ohio County end of the Owensboro Field in the last week. The important find was the bringing in of an excellent gas well in a test made by F. H. Hupp and others on the Egbert Cambron farm of 50 acres, in the Taffey Field, at a depth of 1,075 feet. Brown and others' No. 5 F. L. Hickey farm, same pool, produced 18 bbls. initial at 690 feet.

Three "C's" Oil & Gas Co.'s No. 4 on the Hill Rhodes 72 acres, in the Taffey Pool, produced 40 bbls. the first 24 hours at 684 feet. Loman, Daly and others' No. 4, on the Feemster-Wimsatt 90 acres, same pool, produced 20 bbls. at 540 feet.

Hupp, Duff and others' No. 2, on the Will Smiley 234 acres, in the Taffey Pool, was dry at 564 feet, while No. 3 is a fair gas producer at 480 feet. H. C. Smith Co.'s No. 1 Cela Bashare farm, same pool, was a duster at 940 feet.

Hall & Garrison's No. 2, on the Tom Helton farm, developed a duster at 680 feet. Dearborn Oil Co. got one of the same kind in No. 2 on the Jim Johnson farm, at 785 feet.

In the Friendship Church area, Bailey & Mayer's No. 1, on an unknown farm, is credited with an initial of 25 bbls.

James C. Ellis and others' No. 3 Frank McKinley farm, in the Aetnaville area, is credited with around 20 bbls. initial.

Daviess County

One of the best recent strikes in the Owensboro district was made by S. M. Sirman in his No. 4 on the H. K. Atherton farm, in the Red Hill area of Daviess County, which is reported to have produced an initial of 350 bbls., while No. 2, same farm, was reported a dry hole, and No. 3 produced 25 bbls. initial.

Evans and Garrison's No. 6, on the J. M. Clark south 90 acres, in the Utica Field, is reported as showing a good gas volume. Hupp, Duff and others' No. 6 W. G. Hayden No. 2 farm, in the Maxwell Pool, is rated at 20 bbls. initial. C. E. Daugherty and others' No. 2, D. C. Stimson farm, produced 75 bbls. the first 24 hours, and is in the Red Hill Pool. Johnson Oil & Refining Co.'s No. 1, in the northeast corner of the W. P. Karn farm, near Habit, produced 15 bbls. the first 24 hours. Eastern Gulf Oil Co.'s No. 2 well, 600 feet from the north line and 200 feet from the east line of the Elizabeth Christian farm, in the Jones Pool, pumped 24 bbls. in the first day's pumping. Jetsan Oil Co.'s No. 4 on the Hinton lease in the Jones Pool, is reported to show 1,000,000 feet of gas in the Barlow sand, and No. 5, same farm, has a showing for a good oil well in the McCloskey sand at 1,145 feet.

McLean County

Miller and Damron of the Creek Oil Co. made a 250-bbl. strike initially in No. 1 on the G. F. Dunn 100 acres, in the Barrett Hill area of McLean County. The same company abandoned No. 2 on the Floyd Kirk 92 acres, same pool. Its No. 1 L. E. Morris farm, same pool, produced 150 bbls. initial, indicating that this pool will be among the best recently opened in the county. This pool is also somewhat spotted as the same company's second test on the L. E. Morris, was a duster. Same company found a fair sized gas well on the Charles Howard farm.

George Engle's test, on the Sandefur lease, in the Barrett Hill Pool, is reported a dry hole.

Henderson County

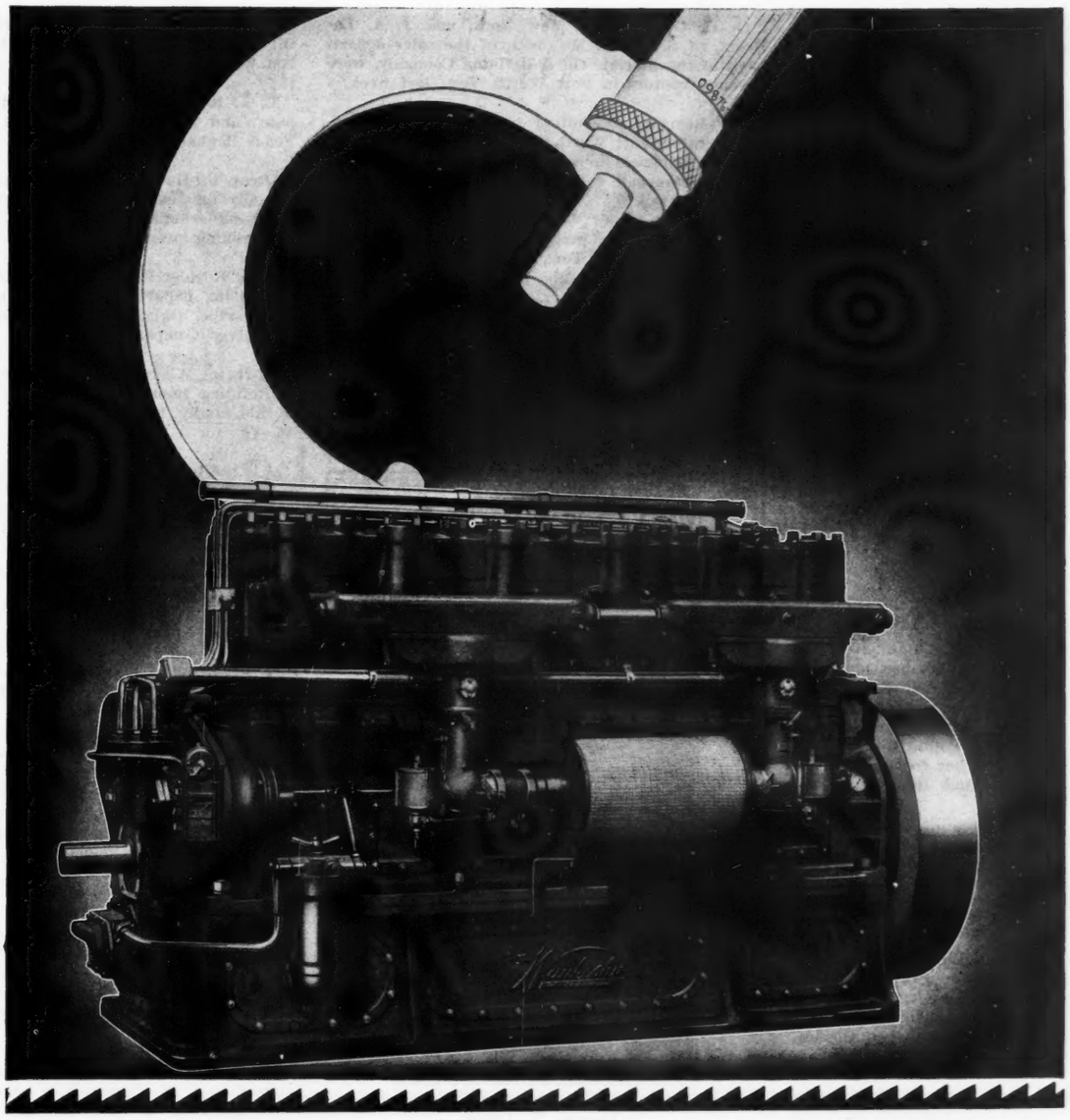
Late completions in the Niagara Field of Henderson County are either dry holes or small pumpers. The Niagara Oil & Gas Co.'s No. 1 J. T. Tilliston farm, is a 15-bbl. pumper. Wittmer Oil & Gas Co.'s No. 4 N. R. Jackson farm, pumped 2 bbls. initial, and the Pearson Petroleum Co.'s No. 1 Tom Parks farm, pumped 5 bbls. in 24 hours.

Lang Oil & Gas Co.'s No. 1 J. A. Willingham farm, and K. M. Dole and others' No. 1 Joe Walden farm, were both dry holes.

Scattered Wells

Meely Oil Co.'s No. 1, Taylor farm, 5 miles north of Scottsville, in Allen County, is reported as showing for 200 bbls.

(Continued on Page 157)



QUALITY AND PRECISION . . .

PAID UP LIFE INSURANCE FOR YOUR ENGINE

Bulletin 813 describes new Oil Field Engine.

Waukesha Motor Company,
Waukesha, Wisconsin.

343

WAUKESHA ENGINES

Personal Paragraphs About Oil Men

Byron Rife, of Oyster & Rife, San Antonio, Tex., has been in Ohio several weeks visiting relatives.

* * *

Dr. B. B. Burns, of the International Petroleum Company hospital staff in Talara, Peru, with Mrs. Burns, is spending three months in Ontario.

* * *

D. G. Fisher, general division manager of the Shell Oil Company for the Pacific Coast, recently made a trip to Calgary, Alberta, by airplane.

* * *

George L. H. Koehler, president and general manager of Houston Terminal Refining Company, Houston, Tex., is spending a month's vacation at Hunt, near Kerrville, Tex.

* * *

M. E. Mockley, manager of the gasoline plant department of the Amerada Petroleum Corporation, has returned to Tulsa with his family from a vacation trip in Minnesota.

* * *

F. W. Shelton, of Tulsa, is now with the Calmont Oils, Ltd., Calgary, Canada, as petroleum engineer. He reports a combination of many engineering problems in the Turner Valley Field.

* * *

George N. Moore, superintendent of the marketing and refining department of the Cosden Oil Company in Chicago, visited the Cosden company's offices in Fort Worth, Tex., last week.

* * *

M. J. Callaghan was recently elevated to the post of acting superintendent of the Union Oil Company's Producers pipe line and Lompoc pipe line with offices at San Luis Obispo, Calif.

* * *

Miss Florence W. Lundell, librarian in the technical department of the Tulsa Public Library, has left for a month's vacation at her former home in Colorado and for a visit through the Yellowstone Park.

* * *

Ralph Walkingstick, president of the Mid-Continent Land Men's and Scouts Association, and a scout for the Tidal Oil Company in the Shawnee, Okla., district, with his family is spending a vacation in Arizona.

* * *

H. M. Macomber, vice president and general manager of the Getty Petroleum Corporation for Texas and New Mexico, has been transferred to Fort Worth, Tex., where the company has offices. His home and offices formerly were in Los Angeles, Calif., where the company has its main offices.

* * *

Dr. Eugene A. Stephenson, formerly chief geologist for the South Penn Oil Company and for many years associated with Ralph E. Davis, engineer, of Pittsburgh, Pa., has accepted the position of professor of petroleum engineering at the School of Mines and Metallurgy, University of Missouri.

* * *

B. B. Kitchen, of Los Angeles, Calif., has returned to Michigan after spending several months in Texas watching operations for the Swastika Oil & Gas Company, and with Guy I. Warren, an old partner, has purchased a 52-acre lease in the Mount Pleasant area on which they will drill at once. Warren and Kitchen have been active in Michigan since they entered the Muskegon Field more than two years ago.

* * *

K. J. Smith, superintendent of the Skelly Oil Company refinery, Eldorado, Kans., and W. E. Purdue, of Winkler & Koch, Wichita, Kans., have returned from a vacation on the West Coast, particularly Washington and Oregon. K. J. had not been air minded, insisting that he would wait until one leg had grown long enough so that he could keep one foot on the ground. However, Bill persuaded him to make a trial flight from Frisco to Los Angeles, which was made quickly and comfortably. Then as time was getting short Bill one night booked K. J. for the flight from Los Angeles to Wichita. K. J. arrived in good fettle with the remark that there was nothing to it.

O. H. Gundlach, of New York, and J. A. LaBrant, of St. Louis, Mo., both of the sales department of the Sinclair Oil & Refining Company, were business visitors in Fort Worth, Tex., last week.

* * *

Roy Reynolds, consulting geologist and independent operator, Fort Worth, Tex., has been selected to make a geological tour and inspection trip through several European countries, for a group of New York bankers.

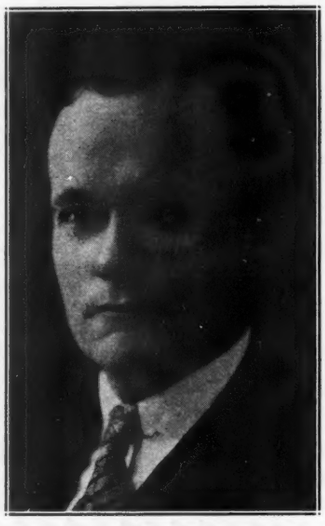
* * *

George S. Heyer, president of Cranfill-Reynolds Company, Houston, Tex., has left for the East where he will spend his vacation. He made the trip from Galveston, Tex., to New York by boat and will return by rail.

* * *

N. W. Hunter, assistant to O. R. Seagraves, former president of the United Gas Company, Houston, Tex., has resigned from the United Gas Company to become associated with the Morgan and Seagraves interests of San Antonio, Tex.

Men in the Industry



Thomas W. Leach

Thomas W. Leach, chief geologist for the Transcontinental Oil Company, Tulsa, has been associated with that organization since August, 1920. Previously he was in the production department of the Josey Oil Company for a short time, and also in the petroleum engineering department of the Wiser Oil Company.

After four years of field geology in Oklahoma, Kansas, Texas and Colorado, Mr. Leach was transferred to the Tulsa office of the Transcontinental to assume charge of the geological work of the Oklahoma-Kansas division, filling the position of R. M. Gawthrop who resigned to become chief geologist of the Prairie Oil & Gas Company. Five years later, upon the retirement of Ray V. Hennen, then chief geologist, Mr. Leach was placed in entire charge of the company's geological exploration.

Mr. Leach was born in LaCrosse, Wis., December 23, 1896, and received his early education in Pine Bluff, Ark. While attending the Missouri School of Mines, where he received his degree, he became a member of the Pi Kappa Alpha fraternity. Serving in the World War, Mr. Leach was first an officer in the Eighty-ninth Division and was later transferred to the air service as a lieutenant in aerial observation. He now ranks as a captain in the field artillery branch of the Officers Reserve Corps.

R. H. Carr, chief petroleum engineer of the Pure Oil Company in Chicago, was in Fort Worth, Tex., last week.

* * *

L. Y. Newman, of the Magnolia Petroleum Company, and family are spending a vacation in the Texas Panhandle with relatives.

* * *

Oscar R. Howard, California and Mid-Continent oil operator, has returned to Los Angeles, Calif., following several days spent in Arizona looking over mining interests.

* * *

Egon Koehler has resigned as an assistant in the purchasing department of the Empire Companies, Bartlesville, Okla., to become associated with the Moorelane Company, Tulsa.

* * *

Harry C. Wiess, vice president of the Humble Oil & Refining Company, Houston, Tex., accompanied by his family, has gone to White Sulphur Springs, W. Va., for a vacation.

* * *

A. G. Clarke, former managing director of Alberta Pacific Consolidated Oils, Ltd., has returned to Calgary, Alberta, from a trip to California, Florida, Panama, Cuba and Great Britain.

* * *

C. V. Lee, executive vice president of the Taylor-Link Oil Company, San Angelo, Tex., and family, have gone to Parkersburg, W. Va., the Lees' old home, where they will stay about a month.

* * *

J. Elmer Thomas, petroleum analyst for Fenner & Beane, and a member of that firm's Tulsa office staff, has been granted a three months' leave of absence, which he will spend in Europe studying foreign oil resources and conditions.

* * *

J. S. Ross, field engineer with the Southern States Company, Inc., Shreveport, La., was in Tulsa last week after a trip through the Panhandle of Texas and Yates Pool where he has been working on problems in the interest of his company. Mr. Ross now resides in Fort Worth, Tex.

* * *

William Ivey, chairman of the Kern River Oil Fields of California, Ltd., St. Helens Petroleum and a number of other affiliated companies, is in California looking over the general situation but will return to the general offices, London, England, in the near future.

* * *

J. E. Dyer, in charge of construction, and assistant to J. W. Carnes, vice president of the Sinclair Consolidated Oil Company of New York, was in Fort Worth, Tex., last week. Mr. Dyer has been working out plans for Sinclair's new offices which will be in the new Dulaney Building after October 1.

* * *

Charles Dimmit, vice president in charge of production; Gillette Hill, vice president in charge of the land department; and A. U. Levorsen, chief geologist of the Independent Oil & Gas Company, Tulsa, are making an inspection trip in various parts of Texas. Gilbert Wood, in charge of the Texas division, Fort Worth, Tex., accompanied the men on the trip which is being made in the company's plane.

* * *

Texon Oil & Land Company, subsidiary of the Continental Oil Company, moved the following men from the field office at Santa Rita, Tex., to Fort Worth: L. N. Nickey, assistant secretary, treasurer and auditor of the company, in charge of the temporary office in the Electric Building; P. L. Arrington, auditor; T. M. Gondean, assistant auditor; C. J. Cooper, production accounting department; E. T. Stearns, accountant; and W. R. Arrington, accountant. The Continental Oil Company will soon move its offices from the Waggoner Building to the new Fair Building, and the accounting department of the Texon Oil & Land Company will also be moved from the Electric Building to the Fair Building.

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Technical Questions Answered

BY CHARLES K. FRANCIS, PH.D., TECHNICAL EDITOR

This department of The Oil and Gas Journal is devoted to the manufacturing branches of the oil industry.

Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit their problems to Dr. C. K. Francis, technical editor. The department was created for the purpose of aiding managers, superintendents, engineers, chemists and all those engaged in the various phases of plant operation; also those connected with the marketing and utilization of petroleum products.

Questions should be submitted in as much detail as possible so as to assure a satisfactory answer.

All inquiries should be signed and if other than the given initials are to be used please indicate the desired letters.

Questions involving patented processes, intricate formulas and calculations and estimates of costs, for obvious reasons, cannot be answered. The replies will appear on this page within a reasonable time.

SILLIMAN REPORT REFINING OF PETROLEUM

I am directed to the Silliman report for original information covering the first refining of petroleum but do not know just what this report is or where it was printed, so any information you can give me about it will be appreciated.—R. W. J.

The Silliman report was one rendered by Professor Silliman, of Yale College, concerning a sample of petroleum from a seepage or spring in Venango County, Pennsylvania, to Eveleth, Bissell and Reed, under date of April 16, 1855. This was a private communication made over four years before the drilling of the Drake well; in fact, the findings of Professor Silliman were so encouraging that a company was formed for the purpose of devising means to obtain petroleum in larger quantities and this company was responsible for the final drilling of the Drake well.

While a few copies of the report appear to have been printed for private distribution some time in 1855, the first public appearance was in the American Chemist, Vol. 2, page 18, July, 1871. The report was reprinted in The Oil and Gas Journal, September 9, 1926, page 170.

The editor of the American Chemist made this comment: "We are struck with the fact that its author very nearly exhausted the subject, and anticipated and described most of the methods of treatment, which have since been adopted by manufacturers. He even suggests distillation by high steam, which has been adopted with so much success by Merril in the preparation of his neutral oil. He also noticed the peculiar breaking up of the heavier oils into lighter products, under the continued action of heats far below their boiling points, now called 'cracking.' He remarked that when 'exposed for many days in an open vessel at a regulated heat below 112° C., the oil gradually rises in vapor' gradually and slowly disappearing, and finally leaving a small pitchy dry residue."

Silliman separated and studied eight products in addition to the residue from the distillation, these varied in density from 0.733 to 0.854, or on the basis of A.P.I. modulus, from 61.5 to 34.2° The first product was essentially water. "Product No. 2 was an oil perfectly colorless, very thin and limpid, and having an exceedingly persistent odor, similar to the crude oil, but less intense. Product No. 3 was tinged slightly yellow, perfectly transparent and apparently as limpid as the second product, with the same odor. Product No. 4 was more decidedly yellowish than the last, but was in no other respects distinguishable from it. Product No. 5 was more highly colored, thicker in consistence, and had a decided empyreumatic odor. Product No. 6 and the two subsequent products were each more highly colored and denser than the preceding."

The conclusion of the report contains the following: "In conclusion, gentlemen, it appears to me that there is much ground for encouragement in the belief that your company has in its possession a raw material from which, by simple and not expensive process, it may manufacture very valuable products.

"It is worthy of note that my experiments prove that nearly the whole of the raw product may be manufactured without waste, and this solely by a well directed process which is in practice one of the most simple of all chemical processes."

AVAILABLE SUPPLY OF GASOLINE

How is the available supply of gasoline determined? Is it based on the crude oil or the gasoline held in storage tanks? How many days are considered to represent a normal supply?—T. H. L.

The data relating to gasoline supply are gathered by the United States Bureau of Mines and such interpretations as available daily supply are calculated from the quantity reported to be in storage at the refineries as compared with the average daily shipments. This means gasoline which has been manufactured and has no relation to the potential supply in the form of crude oil. Recently there has been a tendency away from large storage volumes of gasoline. This has been brought about to a large extent by larger distilling units and the increased yields from the higher grade crude oils that have been produced within the past few years. Without doubt, the quantity of gasoline held in the crude oil in storage represents a quantity that may be very quickly converted to a marketable product.

Just how many days' supply of gasoline could be called normal will depend on the season and the part of the country. For the average of the United States it seems to fall somewhere between 30 and 50 days. Probably 30 days would indicate a good condition for the industry. The table following shows the number of days supply on hand at the refineries at the end of the year for each of the past four years.

The number of days supply was determined for the purpose of this table by dividing the total volume of gasoline stocks in the district at the close of the year by the average daily shipments during the year. Shipping and storage facilities have much to do with the quantity that may be held in storage in any particular district; also, low temperatures are desired so that loss may be kept at the minimum.

District—	1926	1927	1928	1929	Average 4 yrs.
East Coast	58	33	38	39	42
Appalachian	25	30	29	32	29
Indiana, Illinois, Kentucky	40	31	34	32	34
Oklahoma, Kansas, Missouri	22	20	22	24	22
Texas (except Coast)	11	17	16	22	16
Louisiana and Arkansas (except Coast)	5	6	10	14	9
Texas Gulf Coast	34	27	24	28	28
Louisiana Gulf Coast	62	25	37	29	38
Rocky Mountain	94	36	35	54	55
California	83	80	46	63	68
United States	48	36	32	37	38

RECLAIMING DRY CLEANERS GASOLINE

Have you any information about the methods used for recovering and purifying gasoline used in dry cleaning? Would appreciate especially a description of the phosphate method for this recovery.—P. H. H.

The reclamation of the solvent that has been used in dry cleaning presents something more than the ordinary problem because of the numerous substances that usually contaminate the gasoline. Large quantities of ordinary gasoline are used in the dry cleaning industry, but many plants use a special naphtha representing a gasoline from which the more volatile portions have been removed. The process suitable for recovery of either would be the same in principle. It is more difficult to recover a solvent of this sort than it is to make the product at the refinery where the impurities are of mineral origin. Any recovery process to be satisfactory must give a high yield of the solvent, which must be free from objectionable odor and colorless.

The ordinary methods for the reclamation of cleaners solvent are based on a combination of distillation and filtration. Technologic Paper No. 280 of the Bureau of Standards, 1925, by C. C. Hubbard, "Reclamation of Gasolines Used in Dry Cleaning," is a report of the investigations of processes used for the recovery of gasoline that has become unfit for further use in dry cleaning plants. The processes are listed under Distillation, Centrifugal, Simple filtration, Carbon, Acid, Caustic alkali-centrifugal, Titration, Caustic alkali-filtration, Acid-alkali, Carbon-phosphate. This report calls attention to one or more objectionable features of the first nine of these and recommends a procedure for the carbon-phosphate process, which was found by experiments to be the most satisfactory.

The carbon-phosphate process consists in treating the used gasoline with activated carbon and a water solution of trisodium phosphate. A complication in the refining of the cleaners gasoline is the presence of soap, which because of its colloidal nature holds the finely divided dirt, or other solid material, in suspension and in a similar manner prevents rapid settling of the minute particles of carbon. Of the various chemical agents examined, it was found that the solution of trisodium phosphate gave more rapid settling of the precipitated and suspended matter. The salient features of the process are treatment of the gasoline with activated charcoal and a water solution of trisodium phosphate, definite time of agitation, definite temperature range, settling, and finally decantation of the colorless, recovered solvent. Complete details of method and apparatus may be obtained from the original paper.

There is considerable danger when using ordinary gasoline for dry cleaning; a special naphtha is to be preferred. This has many advantages because of its exceptional purity.

SHALE OIL REFINING

What methods are used for the refining of shale oil? Is the purification of products from shale oil more expensive than the purification of the similar products obtained from crude oil?—M. G.

The refining of shale oil may be considered to start with the methods used for the production of the oil from the shale. Heat is required and the conditions of the retorting operation have much to do with the character of the oil in addition to the quantity obtained from a unit weight of shale. The chemical reactions are similar to those when oil is cracked and in the distillation of coal. Somewhat different properties may be expected when the shale is retorted under vacuum, under normal pressure, with pressure and hydrogenation.

Appreciable quantities of water are produced from shale together with the oil. The yield of water is due to water held mechanically, water in chemical combination, and water formed by decomposition. Some of this water does not settle very well so an additional distillation is frequently required to obtain complete dehydration. The quantity of water may vary from 1 gallon to 25 gallons per ton as compared with an oil yield between 15 and 120 gallons per ton.

The actual purification of the oil is accomplished by methods identical with those commonly used for the refining of raw petroleum products with the exception that more sulphuric acid is necessary for the lighter oils than is used in treating similar distillates from petroleum. Larger quantities of the chemicals are required so the process is more expensive on a unit volume basis.

EXPANSION COEFFICIENTS PETROLEUM LIQUIDS

We desire information regarding the coefficient of expansion of petroleum and the various petroleum products. If you are in a position to give us this information we will greatly appreciate your co-operation.—J. J.

Petroleum liquids expand and contract to a definite extent as the temperature is raised and lowered. The extent of the change in volume becomes greater with increase in A.P.I. degrees; that is, the lighter the density of the product the larger will be the volume change for a fixed temperature. When corrections of this sort were first made petroleum of the Pennsylvania Grade was assumed to have an average thermal expansion of 0.0005 per degree, and from this it became customary to deduct 1 per cent of the volume for each 20° above 60° F., and to add an equivalent correction for each 20° below 60° F. Since then it has been found that the thermal expansion of all crude oils is not at the same rate and that the rate changes with density.

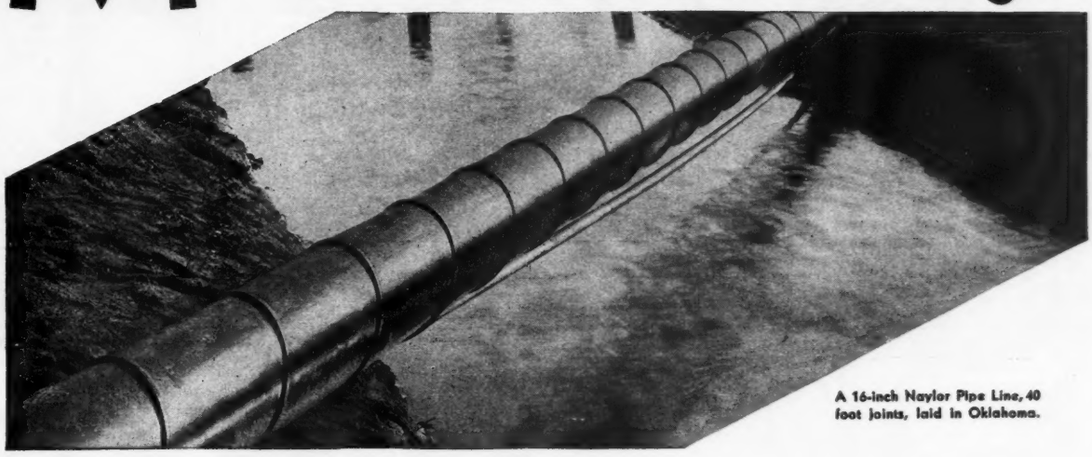
Data from numerous investigations have indicated that the various petroleum liquids may be arranged into six groups for an appropriate coefficient of expansion.

Products—	Group	Coef. expan. at 60°F.	Gravity A.P.I.
Crude, fuel, etc.	1	0.0004	Up to 35
Kerosene, etc.	2	0.0005	35-50.9
Gasoline	3	0.0006	51-63.9
Gasoline	4	0.0007	64-78.9
Natural gasoline.	5	0.0008	79-88.9
Natural gasoline.	6	0.00085	89 & above

An article on Measuring and Calculating Outages, by John Stumpf, was published in The Oil and Gas Journal, April 21, 1927, page 86.

Other information on the subject may be found in National Standard Petroleum Tables, United States Bureau of Standards, Cir. 154. Same Letter Circular, 160.

Maximum Structural Strength



A 16-inch Naylor Pipe Line, 40 foot joints, laid in Oklahoma.

Why It Is Inherent In Naylor Pipe

MAXIMUM structural strength is assured in Naylor Pipe by *distinctive* engineering features never before used in any pipe.

Bulky wall thicknesses are not relied upon to give Naylor Pipe its strength. On the contrary...the *electrically welded* spiral lock-seam truss provides a mechanically correct structure that stands the stress of the loads carried.

Not only that...but the spiral lock-seam truss structure of Naylor Pipe provides this great strength at 50% reduction in weight, as compared with standard weight wrought pipe.

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Maximum Structural Strength — Mo-lyb-den-um — With Minimum Weight

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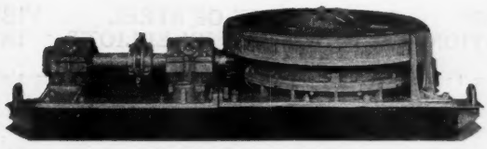
Standardized Naylor Pipe is made in sizes 6" to 12" I. D. and 14" to 20" O. D. in any uniform length desired up to 40'0". Ends made to wrought pipe standards for all types of coupling.

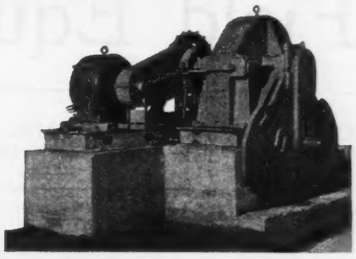
Toncan Copper Molybdenum Iron possesses a superior corrosion resistance making it the favored pipe material.

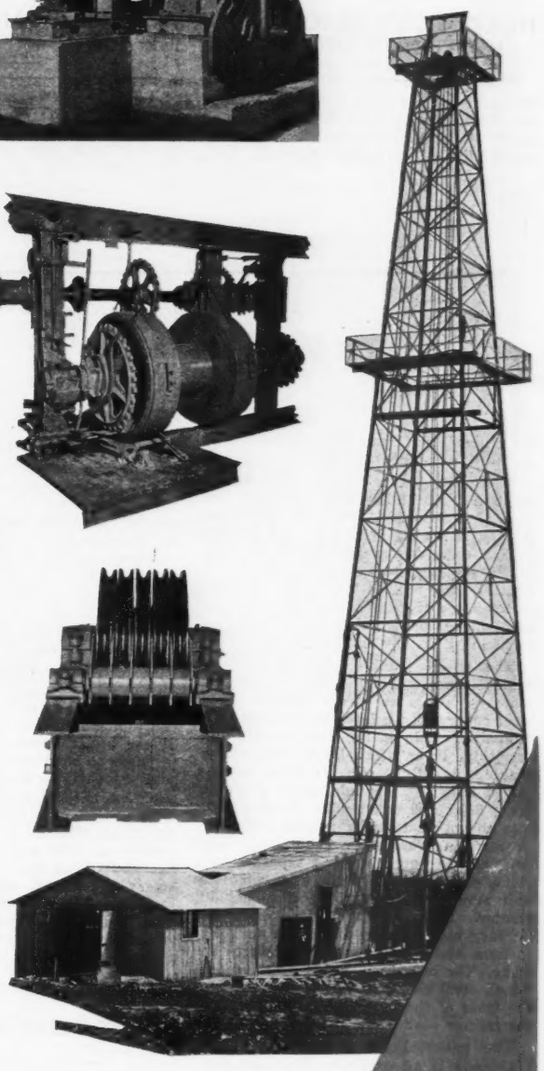
Where corrosion is not a problem, Naylor Pipe can be furnished in steel.

Snapped By the Camera in Different Active Oil Areas

1—G. A. (Buddy) Jones, pilot and aero salesman for the Texas Pacific Coal & Oil Co., Fort Worth, Tex. 2—L. A. Whitlock, refinery superintendent, and C. T. Childs, assistant refinery superintendent, William Andrews Refining Co., Los Angeles, Calif. 3—J. M. Sides, representative, Smith Separator Co., Fort Worth, Tex. 4—Fred Fellows, superintendent, and Martin Lee, Continental Oil Co.'s refinery, Ponca City, Okla. 5—E. W. Zublin, chief chemist, Texas Pacific Coal & Oil Co., Fort Worth, Tex. 6—R. Way, mechanical engineer; E. J. Broberg, field engineer; and H. C. Coats, warehouseman, Parkersburg Rig & Reel Co. 7—J. H. Kirkpatrick, Allis-Chalmers Manufacturing Co., Houston, Tex.; J. T. Hockaday, Mrs. G. W. Curry, and G. W. Curry, General Electric Co., Houston, Tex. 8—I. N. Weaver, lease foreman; J. M. Williams, gauger, and J. N. Douglas, warehouseman, Western Gulf Oil Co., Bakersfield, Calif. 9—George N. McPhee, driller. 10—G. A. Muncy, F. S. Muncy, William Bruce and J. C. Thomas, drilling crew on Skelly Oil Co.'s No. 1 Ainsworth, Oklahoma City Pool. 11—Paul T. Vickers, secretary, Midland Chamber of Commerce, and H. P. Cartney, California Co., Iraan, Tex.







"IDECO" does not offer its experiments to the oil producer. Every piece of equipment is field tested before its announcement to the trade. As a result, the annoying little details of improper assembly are eliminated. We *know* exactly what performance records may be expected.

Back of these field tests is an engineering and metallurgical research division of Ideco. In our laboratories are studied and analyzed the steels from which Ideco products can be made. The best steel for the purpose is selected. Then comes the mechanical engineer with his facts on stresses and strains. *But the resulting product goes to the field* for *actual test.*

Ideco's position of leadership, therefore, is due to its exact knowledge of what will best meet oil production problems. In derricks, we believed the "Ideco" design of galvanized structural steel answered the question. Time has proven this correct—in length of service, all-around economy and ease of handling. In drilling and pumping equipment there is a steadily growing acceptance of the Ideco idea, i.e., to Study your problem, Research it, Engineer it, and then field test it. Only when we have proven the product the best for your service, can you have it.

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Houston, Texas; Los Angeles, Calif.

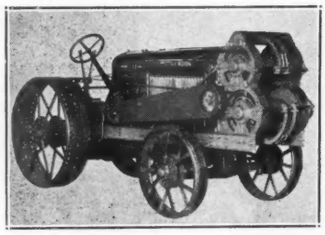
721

The Mark that stands for Satisfactory Service

Oil Field Equipment and Supplies

HEAVY-DUTY TRACKSON HOIST NOW ON MARKET

The Trackson Co., Milwaukee, Wis., announces a new model Trackson hoist, the "HM," designed for mounting on the 15-30 McCormick-Deering tractor. It is essentially a heavy-duty machine, built



for general, all-around hoisting usage and for hard, continuous service.

There are many uses for this equipment in the oil and gas fields and in the pipe line industry, some of which are moving derricks, drill rigs and boilers, pulling rods, tubing and casing, erecting tanks, skidding heavy machinery, loaded trailers, etc., pulling big trucks up steep inclines and through mud holes and soft ground, and many other jobs which can be handled best by a hoisting outfit.

The model "HM" hoist has greater cable capacity, improved screw-type clutches, oversized drum shafts, hand lever control and a level wind device that wraps the cable on the drum evenly and smoothly, layer after layer, eliminating kinking, tangling, etc. It may be obtained either as a single or as a double drum hoist and can readily be converted into the other type by merely mounting or removing the upper drum. Also the hoist can be purchased as a separate machine, or it can be ordered as a complete unit mounted on the 15-30 or Model 30 tractor. Installation on the tractor is an easy matter, since there are no holes to bore and no construction changes to make. The hoist is mounted by means of 6-inch steel channels which extend from the front of the unit back to and around the tractor rear housing.

The patented Trackson Level Wind (fairlead) is an exclusive Trackson feature. It prevents the cable from criss-crossing or bunching up as it is wound onto the drum.

REX DISTRIBUTORS APPOINTED

New distributors who will handle the various Rex products manufactured by the Chain Belt Co., of Milwaukee, Wis., are the Equipment Corp. of Arizona, Phoenix, Ariz.; F. C. Crane Co., Dallas, Tex.; Joe C. Tucker, Morganfield, Ky.; Track-Type Tractor & Equipment Co., Amarillo, Tex.; and Concrete Products Co., Oakland, Calif. The Rex line includes mixers in one-half to 12-bag sizes, pavers and road pumps, saw rigs, contractors' elevators, moto-mixers and pumps. In addition to these new construction equipment distributors, the Chain Belt Co. has appointed E. C. Atkins & Co., Inc., of Memphis, Tenn., as chain and power transmission representatives. The Atlanta office of the company has been moved to 407 and 408 Bona Allen Building.

W. C. Jolly, representative of the Smith Separator Co., formerly with headquarters in Seminole, Okla., has been transferred to Fort Worth, Tex. J. M. Sides, who represented the company in Fort Worth, Tex., is moving to Midland, Tex., to take over the West Texas and eastern New Mexico district.

AMERICAN TANK PLANT IS NOW IN OPERATION

The new factory of the American Tank & Equipment Corp., formerly American Tank Co. of Oklahoma City, is in operation. The concern, a subsidiary of Black, Sivalls & Bryson, Inc., of Bartlesville, Okla., will specialize to a marked degree in welding, although some riveted work will be done.

To show the company's faith in its own line of work, its new plant building is of all-welded construction, all members of the framework being welded together. Only three rows of columns support the structure, the biggest shop of its kind west of Chicago and one of the very few in the country. This plant is fireproof. It was built in six weeks—half of which time was taken in welding the framework.

The fabrication of the spans was done in the Kansas City plant of the Black, Sivalls & Bryson Manufacturing Co. Here the steel was welded together and the framework was shipped to Oklahoma City where it was erected, and the large units welded into place during the construction of the major framework.

Adjoining the factory building is being erected one of the largest heat treating furnaces in the country, 80 feet long, 13 feet wide and 18 feet high. This will be used to anneal or heat treat the heavy vessels that have been welded so as to equalize stresses and assure full strength of the metal.

Production in this plant will be on a continuous line and built on the principle of the larger automobile factories. The products to be manufactured at this plant will consist of many appliances now made at the old plant of the American Tank Co. including the improved American patented oil and gas separator, welded oil field tanks, welded bulk storage and filling station tanks, welded refinery equipment, welded piping, building caissons, bridge piers, packing house vats, condenser boxes, pressure drums, smoke stacks, and numerous other welded products.

ROTARY HOSE OF STEEL NOW MADE BY ELLIOTT

A different type of steel rotary hose has been placed on the market by the Elliott Manufacturing Co. of Los Angeles, Calif. It is called the Elliott All-Steel Straight Line rotary hose. As the name implies, it is of all-steel construction and as nearly as is possible a straight fluid passage is maintained, which corresponds closely with the inside diameter of the pipe used.

The construction is simple. Ball type universal joints are connected by seamless pipe sections. These joints are all identical and each end of the joint may be flexed in any direction to 23°.

In operation, this hose closely resembles the rubber hose, the greater part of its length hanging in a straight line and the rest forming a regular curve similar to that of the rubber hose.

It is said by the manufacturer that these universal joints will withstand pressures in excess of 8,000 pounds per square inch.

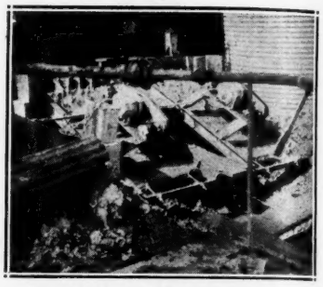
FIELD PIPE LINE WRAPPER

A hand-operated pipe line wrapping machine which wraps all pipe sizes from 4 to 24 inches at a uniform speed of 15 linear feet per minute, is a joint product of the Johns-Manville Corp. and the W-K-M Co. The pipe line wrapper is simple. It is carried on spring-mounted rubber rollers which iron out all wrinkles or air spaces which may develop in the felt as it comes from the roll. This roll of felt is carried on the machine and is applied so as to give a 1-inch lap. The wrapping machine may be used on either bonded or unbonded jobs without change in machine or method.

R. L. Crain has joined the Hydraulic Equipment Corp., Houston, Tex., as hydraulic engineer. Mr. Crain is a graduate of Rice Institute, Houston, engineering department, and has several years' designing experience.

VIBRATING SCREENS AID IN ROTARY MUD PROBLEM

California operators have made further advancement in solving their mud reconditioning problems than operators in other fields probably because of the proximity of the oil fields to ore milling



and industrial plants using special equipment for treating other products.

Vibrating screens have proved useful in removing rotary cuttings from the mud and at the same time this violent shaking of the mud fluid has removed the greater portion of the gas that was entrained in the mud as it returned to the surface from the well.

The accompanying picture shows one of these installations at a well in California as made by Leahy-McNeely Co., of Long Beach, Calif., that is giving good service. Similar installations have been made at other wells in Ventura, Kettleman Hills, Atwood and other fields and the use of vibrating screens seems to be expanding rapidly.

Troubles that were experienced in the first installations due to breakage of the fine screen cloth used have been overcome by the application of a new type of supporting device for this cloth. Application for patent for this improvement has been made as well as other patents for improvements in vibrating mechanism.

As usually installed the battery consists of two 3'x5' screens, set side by side over the suction tank, and the undersize material falls directly into this tank and is returned to the well while the oversize carrying cuttings is discharged to waste.

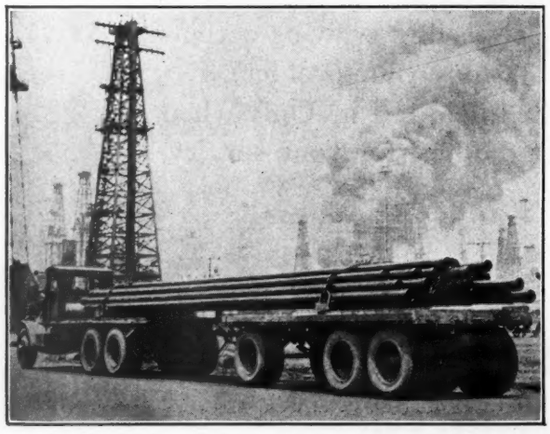
The two screens have ample capacity for handling the mud required in drilling the deep wells common to these California fields. Power is obtained from electric motor or steam turbine mounted on supports and carried above the screen body.

The screen wire is mounted upon removable screen frames that can be replaced in about 30 minutes and with the improved method of supporting this screen wire a life of from two to eight weeks is being gained from the screen cloth. When the well is completed the screens are dismounted and moved to a new location and the principal item of expense is wire screen cloth replacements.

NEW PACKING DISRUPTS

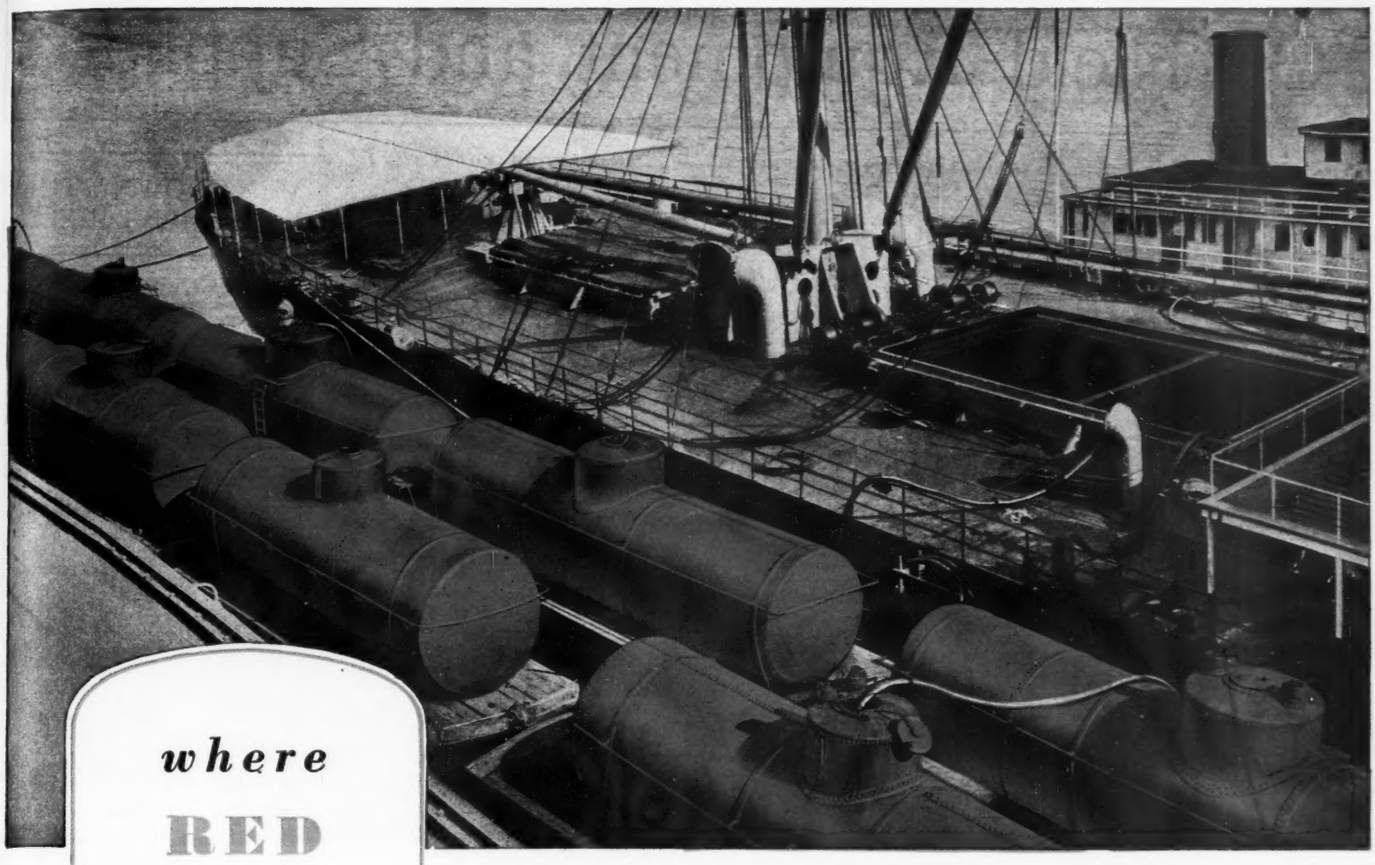
Metalastic, Inc., of Union City, N. J., is putting a new packing on the market called "Cordex." It is composed of metal particles, asbestos fiber, binder, and a specially prepared lubricant encased in a thin shell of viscous material. It comes in straight rods, 18 inches in length. After the packing is wrapped around the rod, inserted in the stuffing box and the gland drawn up, the casing disrupts and a perfect seal and bearing are said to be created.

LESS THAN 14,000 POUNDS BORNE BY ANY ONE AXLE



The illustration shows how a six-wheel truck and six-wheel trailer are able to carry 20 tons pay load with less than 14,000 pounds being carried on any one axle. The truck is equipped with a Utility six-wheel attachment and is pulling a Utility six-wheel trailer, equipped with 40"x8" dual pneumatic tires. Both the attachment and the trailer are products of the Utility Trailer Manufacturing Co. of Los Angeles, Calif.

Twenty-three states, including California, Texas, Pennsylvania and New York now have highway laws which permit and encourage much greater loads when the truck is equipped with six wheels instead of four, and other States are contemplating similar measures, as it has been found that less damage actually is done to the highways with the greater load when the weight is distributed over more wheels with large tire capacity, especially when equipped with pneumatic tires.



where **RED** *signals safety*

A *guard* that says.... Keep Out! *Corrosion*

RED LEAD *safeguards* Metal

THE blue-coated officer on his beat ...the grim, gray dreadnaught of the deep... both are guardians of property... both are symbols of protection.

In the same class, you can also place pure red lead... for it is the guardian of metal structures. It keeps out corrosion, the destructive agent which stealthily attacks unguarded metal structures.

Leading authorities on the subject know that red lead safeguards metal by sealing out corrosion... know that it keeps out air and moisture which foster corrosion.

Dutch Boy Red Lead is accepted as standard by leading engineers and metal maintenance authorities. Pure, fine and highly oxidized, it gives a degree of protection available with no other paint. Red signals safety... when the red is red lead.

Dutch Boy Red Lead is available in two forms, paste and liquid. The liquid (ready for the brush) is supplied in six colors... natural orange-red, two shades each of green and brown—and black. The paste comes to you as orange-red but it is easily shaded to dark colors.

Your request will quickly bring you the booklet, "Structural Metal Painting" and you are also invited to consult our Department of Technical Paint Service. In either case, address the nearest branch.

DUTCH BOY RED LEAD

"Save the surface and you save all"—Dutch Boy

NATIONAL LEAD COMPANY

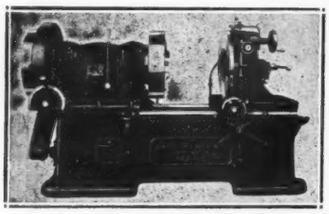
New York, 111 Broadway; Buffalo, 116 Oak St.; Chicago, 900 West 18th St.; Cincinnati, 659 Freeman Ave.; Cleveland, 820 West Superior Ave.; St. Louis, 722 Chestnut St.; San Francisco, 2240-24th Street; Boston, National-Boston Lead Co., 800 Albany St; Pittsburgh, National Lead & Oil Co. of Penna., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., Widener Bldg.

LITHARGE of correct physical character and extreme chemical purity is a necessity in oil-refining. Such litharge is made by the makers of Dutch Boy Red Lead and Dutch Boy White Lead. You can always rely on its unvarying uniformity. Our nearest warehouse can give you quick shipment.

Oil Field Equipment and Supplies

HEAVY-DUTY THREADER DEVELOPED BY JARECKI

An increased production of threads with lower operating costs and lower die costs is said to have resulted from the development of the new high-speed Jarecki heavy-duty threader, made by the



Jarecki Manufacturing Co., Erie, Pa. The 8-inch machine gives an average threading speed of over 29 feet per minute and cuts off 8-inch pipe at the rate of over 100 feet per minute.

Exact duplication of threads, on every run, is assured by the automatic self-opening die-head. A forged steel trigger, extending inside the die-head, automatically opens the dies when the correct length of thread has been cut. This trigger is quickly set for any length of thread desired, by means of a thread length dial on the die-head which is calibrated in one-fourth inches and for Briggs standard.

The trigger recedes out of the way when the chasers are open, returning again to position when the chasers are closed. When desired, the chasers can be drawn back by hand independently of the automatic opening device.

Small chasers are held rigidly in large die-holders. Chasers for the 8-inch machine are 2¼ inches wide, providing ample width for cutting an 8-inch standard thread, which is 2.1 inches long. To speed up the changing of chasers when changes in thread pitch occur, the new Jarecki chasers are firmly clamped in three directions in the large steel holders, by means of one screw. The operator uses only a screwdriver in taking out the tapered screw which clamps the chasers, and he can change a chaser in a few seconds.

The chasers are set exactly to the size of pipe to be threaded, by means of a hand wheel conveniently placed on the die-head, which revolves the cam plate. This is plainly marked for each pipe size in the machine's range.

No change of die-head is necessary when changing over the machine to pipe of a different size. The one self-opening die-head covers the entire standard range of 2½ inches to 8 inches, as well as the extra range of 1½ inches to 2 inches.

NEW JACKSON CONNECTION

The Jackson Engineering Corp., Tulsa, announces a new connection as sales representatives for the "Unipulvo" Unit Pulverizer made by the Strong-Scott Manufacturing Co., Minneapolis, Minn. The "Unipulvo" is an underfed unit pulverizer designed for the efficient utilization of petroleum coke, coal, or lignite for boiler fuel. The sales rights include the entire petroleum industry and exclusive rights for the States of Oklahoma, Texas and Louisiana.

A. F. Murphy has been appointed works manager of the Zanesville division of the American Rolling Mill Co. in Zanesville, Ohio. Zanesville now will be operated as a separate unit, one of Armco's four manufacturing divisions, the others being Ashland, Ky., Middletown, Ohio, and Butler, Pa.

TRADE LITERATURE RECEIVED

The Louis Allis Co., Milwaukee, Wis., has issued a bulletin devoted to its type J totally enclosed fan-cooled motor.

The Edward Valve & Manufacturing Co., East Chicago, Ind., is sending out a bulletin entitled "Better Valves Through Metallurgical Control."

"Oil Well Pumping Units" is the title of a 12-page bulletin being mailed by the Allis-Chalmers Manufacturing Co., Milwaukee, Wis.

Types GB and EB Mid-Continent crown blocks are the subject of a bulletin prepared by the Emsco Derrick & Equipment Co., Los Angeles, Calif.

The August number of the Link-Belt News, published by the Link-Belt Co., Chicago, contains interesting articles on power transmission problems.

S. F. Bowser & Co., Inc., Fort Wayne, Ind., has prepared a complete bound set of the company's bulletins which clearly illustrate and explain its line of lubrication and filtration appliances.

A 30-page illustrated booklet on the new Allis-Chalmers Monarch "35" tractor is being distributed by Monarch salesmen and dealers. It contains a brief but complete description of the "35", including mechanical features and performance.

The Carbon Products Co., Ltd., Los Angeles, Calif., has published a pamphlet of 16 pages describing the manufacture of carbon from petroleum and enumerating some of its uses. The ink used in printing the pamphlet was made from carbon produced by the company.

The current number of the Worthington News, published by the Worthington Pump & Machinery Corp., Harrison, N. J., contains among other features an article by E. W. Hammond, of the company's Buffalo works, on "Practical Diesel Power Plant Layout."

A bulletin issued by the Brown Instrument Co., Philadelphia, Pa., describes the de Florez system of remote manual control handled by the company. This system, it is said, enables the operator to retain the "personal touch" and actual "feel" of the mechanism being operated.

BUSINESS NOTES

W. R. Martin, of Martin-Decker Corp., Long Beach, Calif., is on a vacation with his family in Canada.

Ernest Richardson, representing the National Tank & Separator of Tulsa, made a recent business trip to Houston and the Gulf Coast.

H. H. Gray, vice president of the Gray Specialty Co., Houston, Tex., has returned from an inspection tour of the Oklahoma City and Van Fields.

G. C. Myers has been added to the sales staff of the Thrift Corp., Houston, Tex. His territory will include the Pettus, Refugio and Darst Creek Fields.

The Chicago Bridge & Iron Works has opened a new sales office in Tulsa in charge of D. A. Leach, formerly of the company's New York office.

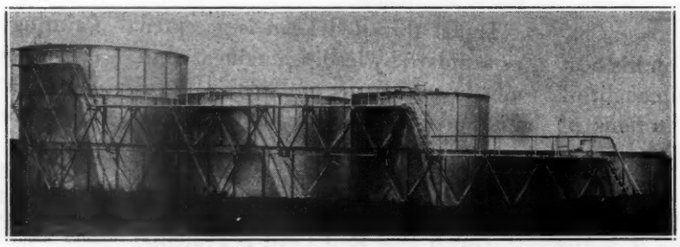
A. M. Durall, construction superintendent for the H. H. Robertson Co., Pittsburgh, Pa., has completed a trip through the southwest oil fields, spending much of his time with R. B. Archer, manager of the Houston, Tex., office.

Humphrey J. Kiely, vice president of the Link-Belt Co., in charge of the export division, announces the appointment of William Piez, brother of Charles Piez, chairman of the company, as European correspondent.

Following the resignation of Leon E. Thomas, president of the Reading Iron Co., the office of chairman of the board of directors was created and A. J. Maloney was chosen to fill it. He will assume the executive duties of the president until a successor to Mr. Thomas is chosen.

The F. M. Crowell Co., manufacturer of oil field specialties, has moved into new quarters at 230 East Third Street, Tulsa. In addition to its regular line Mr. Crowell says the company will handle twentieth century steel cylinder heads, pistons and rings. E. A. Shaw, formerly of the Peerless Supply Co., will share space in the same building carrying a line of equipment under the name of the Shaw Co.

OIL FIELD BORROWS BUILDING IDEA FROM THE NURSERY

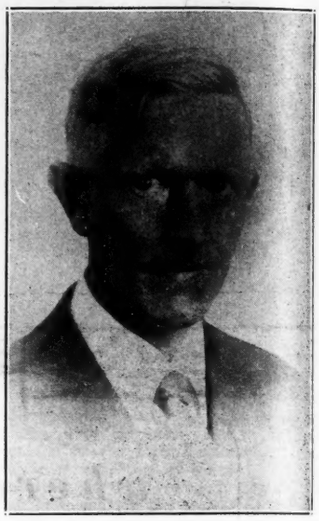


A new runway and stairway, made of interchangeable sections like a child's building outfit, and proving highly adaptable to all kinds of field requirements, has appeared in the Oklahoma City oil field. The picture shown here of a three-level installation by Booth gives a good idea of the flexibility of the new walkway.

The sections are completely fabricated in the factory and shipped knocked down to the field for easy and quick erection. Each section is 90 inches long and 30 inches wide, with a diagonal brace for added strength. The sections are built up with hexagonal gusset plates as illustrated. No riveting or welding in the field is necessary.

The stair structure is strong enough to be entirely self-supporting without the necessity of connections with the tanks at any point. Therefore any desired space between the stair structure and the tanks may be obtained to conform with the requirements of safety engineers. The new stair is a development of the Columbian Steel Tank Co., Kansas City, Mo.

MEN KNOWN *in* THE EQUIPMENT FIELD



J. F. Hanst

The Pittsburgh Valve Foundry & Construction Co., Pittsburgh, Pa., has appointed J. F. (Fabe) Hanst as engineer and sales representative in its oil and gas division.

Mr. Hanst is well known in the oil and natural gas fields and in the mining industry, particularly in the East, where he served as engineer and branch manager for the Ingersoll-Rand Co. for the past 12 years. Previous to his employment by the Ingersoll-Rand Co., and after his graduation from Lehigh University in 1907, with the degree of engineer of mines, he served successively as mining engineer and geologist with the Cleveland Cliffs Iron Co., Ishpeming, Mich.; chief engineer, Cortes Associated Mines, Jacala, Hidalgo, Mexico, and chief mining engineer, Andes Copper Co., Porerillos, Chile.

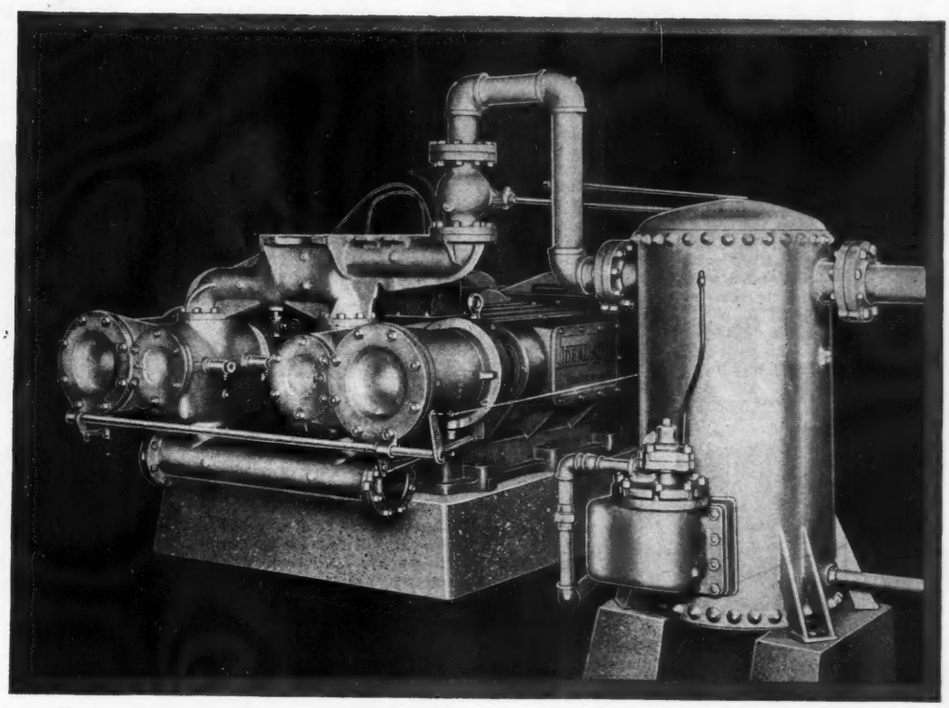
The Pittsburgh Valve Foundry & Construction Co. manufactures valves and fittings and fabricates piping.

MR. YOUNG COMPLETES SURVEY

In the interest of the Diesel engine development, with particular reference to cooling systems, F. M. Young, president of the Young Radiator Co., Racine, Wis., has returned from a trip through the Southwest, where many installations of Diesel engines are used for pumping, stationary power plants, municipal power plants and the like. The Young Radiator Co. has done a great deal of development work and furnished many cooling systems for Diesel and oil engines. These cooling systems are those of the closed type, and it is with the idea of improving the systems and working them out for the larger installations that this survery was made. The atmospheric temperatures under which most of these engines are working at least part time range between 104° and 108° F. and it is necessary to give installations of this type careful consideration in making a unit for cooling these engines over a long period of time.

E. D. Bullard Co., manufacturer of the hard boiled hat and distributor of the U. C. C. combustible gas indicator and methane detector, has established a Chicago office at 224-230 West Huron Street in charge of G. M. Glidden.

Power Over Other Drilling Engines Used"



Latest Model IDEAL-AJAX Twin Roller Bearing Engine with Large Capacity Steam Separator.

Out in California also, the new IDEAL-AJAX equipped with extra capacity steam separator is again making new records.

70% of the steam drilling of the world is performed by AJAX and IDEAL-AJAX, which carry fifty-three years' experience behind their development.

IDEAL-AJAX

ROLLER BEARING

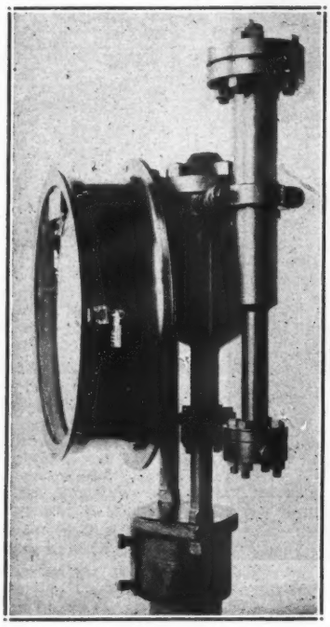
STEAM DRILLING ENGINES

Made by AJAX IRON WORKS, Corry, Pa.

Oil Field Equipment and Supplies

FOXBORO INTRODUCING TWO NEW INSTRUMENTS

The Foxboro Co., Foxboro, Mass., has brought out a new high pressure recording flow meter and flow controller built



for operating pressures of 2,500 pounds per square inch. They serve as companions to the Foxboro high pressure flow meters and flow controllers for 5,000 pounds pressure applications.

The picture shows a single pen 2,500-pound recording flow meter. If static readings are needed a two-pen instrument with static element is furnished. When total flow readings are desired an integrator can be supplied on the instrument. The integrator is a Foxboro product and gives the flow readings without the use of any multipliers.

The new flow meters and also the new flow controllers can be mounted in place without the use of loading devices. This makes them particularly adaptable to modern field service conditions. All parts of the new instruments are specifically designed for high pressure applications. All working parts are drop forgings. The new instruments have no errors or variables. The field experience gained through use of the first high pressure meters and flow controllers, for 5,000 pounds pressure applications, makes this possible.

LINK-BELT IN NEW PLANT

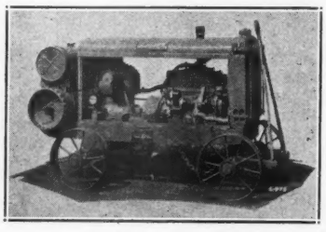
The Link-Belt Co., Pacific Division, has moved into its new manufacturing plant and office at Paul Avenue near Bayshore Highway, San Francisco. This new unit consists of a two-story office building of Spanish design; a warehouse 80'x120', three stories high; and the manufacturing building, containing the machine shop, steel shop, plant office and their auxiliary departments. Within this plant, designed to enable Link-Belt to give quick, efficient service, are manufactured elevating, conveying and power transmission machinery.

The new Trackson trench roller which eliminates hand tamping and puts back all the dirt over newly laid pipe lines is described in a circular issued by the Trackson Co., Milwaukee, Wis.

SCHRAMM INTRODUCES SMALLER COMPRESSOR

The new standard No. 72 compressor made by Schramm, Inc., West Chester, Pa., is a complete engine-driven unit embodying the features found in the company's larger outfits, including the clutch that permits starting engine independently of the compressor; Schramm automatic cut-out, or slow-down, which slows down the speed of the engine when compressor is unloaded; heavy duty tractor type Buda engine; hot riveted A.S.M.E. code tank, one-piece cast steel frame, and the same material and workmanship found in all Schramm compressors. It has a displacement of 72 cubic inches.

This compressor can be used as an auxiliary unit for replacing the larger com-



pressors, on work where only a one-tool outfit is needed, and serves for contractors who need only a small outfit for the occasional rock drilling, paving breaking, demolition work, clay digging, tamping, riveting and other work done by pneumatic tools, on their jobs. Many uses in the oil field suggest themselves.

The oufit is completely housed with removable steel doors and equipped with extra heavy A.S.M.E. riveted tank, fusible plugs and directly connected to the compressor by means of a heavy pipe with rugged expansion joints.

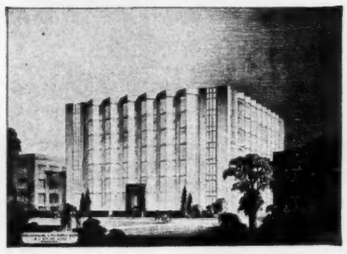
MOTOR REVERSING EQUIPMENT

The General Electric Co. announces a convenient reversing equipment for small motors, CR-7009-B-19. This switch is designed to handle squirrel-cage motors rated 1½-horsepower at 110 volts, and 2-horsepower at 220, 440, 550 and 600 volts, 25 to 60 cycles.

The Linde Air Products Co., New York, has recently published two new pamphlets as a part of Linde process service. "Outline Training Course for Aircraft Welders" is an outline of instructions for aircraft welders based on procedure control. "Production Welding" illustrates and describes the application of the oxy-acetylene process.

A. O. SMITH BUILDING DEVOTED TO RESEARCH

The first of the manufacturing units of the A. O. Smith Corp., Milwaukee, Wis., to command the attention of industry,



was the automatic frame plant, a unit that is as nearly 100 per cent automatic as it is economical to make a factory. At the other extreme, a unit centered solely on the work of men will be found in the Engineering and Research Building—a seven-story building, now under construction. Here the scientific human element will find its greatest expression. Eventually, 1,000 men, carefully selected research engineers and scientists, will carry on the work of invention and discovery. This staff of engineers and scientists, according to the company, will be built up by the addition of more hundreds of men to the many hundreds now with the organization—a force that already records among its achievements the development of the modern pipe mills, automatic frame plant and the welding plants of the A. O. Smith Corp., as well as many contributions to the scientific information and working principles of the industries that the company serves.

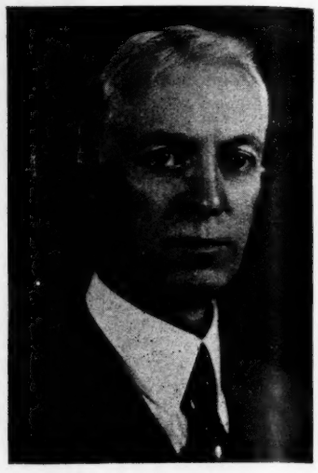
DIRECTOR OF DEVELOPMENT

The Lukenweld, Inc., division of Lukens Steel Co., Coatesville, Pa., has appointed Everett Chapman director of development and research. Mr. Chapman will have general direction of laboratory and investigation work in connection with redesigning of machinery parts for the welded steel type of construction. Mr. Chapman received his master of science degree from the University of Michigan in 1924.

The American Hammered Piston Ring Co., Baltimore, Md., has published a handbook showing outstanding types of piston rings and rod packing for internal combustion engines, steam engines, pumps, compressors, valves, etc. Useful engineering data and general information regarding the company's foundry and machine shop are given.

C. T. MAPES NOW MEMBER OF SPANG & CO. STAFF

Clarence T. Mapes, well known as an engineer in the production end of the oil and gas industry, has joined Spang &



C. T. Mapes

Co., Butler, Pa., makers of oil well drilling equipment. Mr. Mapes, who formerly was manager of the Oil Well Supply Co.'s Pittsburgh plant, has been considered an expert in the production and practical use of drilling and fishing tools for both standard cable and rotary drilling. For five years he has been national secretary of the A.P.I. Committee on Standardization of Cable Drilling Tools.

Spang & Co.'s appointment of Mr. Mapes is in line with its expansion policy affecting the production, distribution and application not only of standard drilling tools but also of weldless drilling and fishing jars and standard and special fishing tools made from heat treated alloy steels.

NIROSTA STEEL IS USED IN FIGHTING CORROSION

An office, decorated and fitted throughout in the same metal that gleams from the tower of the Chrysler Building, has been added to New York's list of novelties. This office, on the twenty-sixth floor of the Grand Central Terminal Building, is interesting many in the possibilities of the new alloy, not only because of the unusual appearance of the room, but also because of the exhibits it contains. In a display room is an exhibit of products produced from Nirosta steel ranging from a coil of wire having a diameter of less than half that of a human hair, to a huge chemical tank capable of handling boiling acids without material deterioration.

Among the samples on display are corrosion-resisting seamless pipe, capable of withstanding the temperature and pressure generated in the cracking processes used in the manufacture of gasoline.

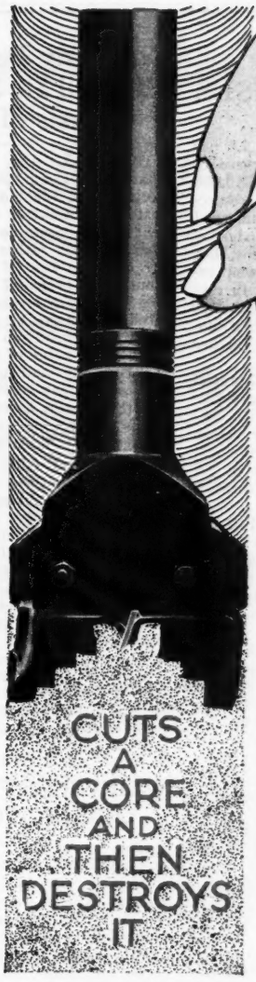
The product has found its way into leading industries. A large tonnage has been used in the oil industry where the greatest enemy to ordinary materials is the corrosion that destroys materials when subjected to the high pressures and temperatures necessary to refining. There are 48 American steel manufacturers now licensed to produce this material. The office and display room is maintained for these licensees, by the Krupp Nirosta Co., Inc., New York.

GASO PUMPS FOR SHIPMENT TO RUSSIAN OIL FIELDS

Gaso oil industry pumps are used in practically every country where petroleum is produced. The picture shows part of a shipment of 32.

The "B-2" Drilling Bit and Model "M" Rock Bit Drill STRAIGHT

Swift and Sure!

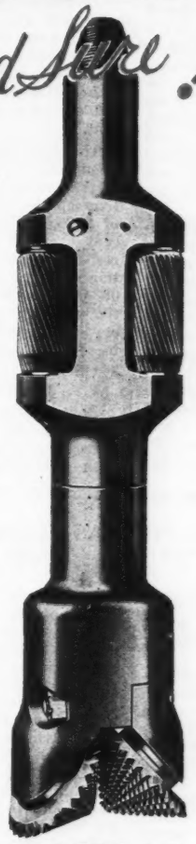


Note the little cone-like formation extending upward within the "B-2" Bit illustrated above. This acts as a guide, holding bit straight to vertical course.

Globe-made Bits bite their way through *any* formation—straight as a plumb-line—incredibly swift—infallibly sure!

The secret of our "B-2" Bit's super-speed and ease of operation lies in a unique construction of the multiple teeth. These are so arranged in graduated serrations, that only a small "nibble" is first made by the bit, cutting the circumference of the core. With the core separated from the surrounding solid earth, it then yields readily to removal; and each succeeding row of teeth slice away their portion of the core.

Simple!—yet marvelously effective—unbeatable for all-around drilling efficiency!



Model "M" Rock Bit and 3-Point Reamer.

THE same straight-to-the-line accuracy of drilling—the same sturdy strength and reliable, speedy work that distinguish the "B-2" Bit, are conspicuous features of the Model "M" Rock Bit.

This efficient tool has extra large cutting surface area, the cutter diameter averaging one-third the width of the hole, accommodating increased size of diameter pins.

The 3-point or double 3-point Reamers have much greater cutting surface area than the ordinary 3-point or double 3-point type.

Records made by these bits under severe tests will interest you. A postal will bring them, together with full descriptive literature. Write today.

GLOBE OIL TOOLS CO.

LOS NIETOS, CALIFORNIA

Successors to

H. C. Smith Manufacturing Co., Inc., Wieman-Kammerer-Wright Co., Inc., National Tool & Metals, Inc.

BRANCHES:

Ventura, Calif. Taft, Calif. Hobbs, New Mexico
Bakersfield, Calif. Kettleman Hills, Calif. Oklahoma City, Okla.

Natural Gas Industry Developments

Nation-Wide Analysis Reveals 55 Per Cent Rise in Sales of Gas

NEW YORK, Aug. 11.—The expansion which has taken place in the field of public utilities during the last decade has been phenomenal, says the National Industrial Conference Board in an analysis of industrial progress and wages in the electricity and gas industries of the United States.

In the gas industry, the number of customers increased from 1918 to 1928 by 34 per cent, the sales of gas in thousands of cubic feet, 55 per cent, and the number of employes, 32 per cent.

Concerning the growth in the production of electricity and its effect on the gas industry, the conference board says:

"This expansion within a short period has been accompanied by a decline in the number of establishments, amounting to almost one-third. The greatly increased consumption of electricity for both domestic and commercial use, especially the rapid growth of lighting by electricity, had affected the use of gas and would undoubtedly have brought about a decline of the gas industry if the latter had not discovered and developed new uses for its product.

"The fact that gas is now used considerably more for cooking and heating purposes than it was a decade ago is the chief reason why the gas industry has not been declining, but has rather expanded."

With respect to increases in earnings since 1914 the conference board report shows the average hourly earnings for all workers in the gas industry increased 114 per cent. Average weekly earnings during the period show an increase of 117 per cent for workmen in the gas industry, divided: Skilled workers, 104 per cent; unskilled workers, 123 per cent.

SASKATCHEWAN GAS PROJECTS

CHATHAM, Ontario, Aug. 11.—Following the proposals of Dominion Gas & Electric Corp., represented by C. J. Yorath, and Northern Utilities, Ltd., to supply natural gas to the various cities of Saskatchewan, the latter is taking steps to confer with a view to working out a uniform policy.

Further conferences have been held between Mr. Yorath and the Regina, Saskatchewan, council in regard to the franchise. The Saskatoon council has named a committee to confer with the other cities interested. The proposals have been made to Regina, Saskatoon, Moose Jaw and Swift Current. The Dominion Gas & Electric Corp. is planning to utilize surplus gas from Turner Valley, where it controls the entire residual gas production of the Royalite Oil Co. Royalite's No. 11 well, just brought in, has added a daily flow of 35,000,000 feet to the available amount.

NORTHERN GAS PROSPECTS

CHATHAM, Ontario, Aug. 11.—The prospective development of export markets for Alberta gas in Saskatchewan and Montana has resulted in renewed interest in the potential gas reserves of northern Alberta. Among these reserves is the Pouce Coupe Field in the foothills due west of Peace River, where several years ago Imperial Oil's No. 1 test got a gas flow estimated at 10,000,000 feet a day. This has been shut in. Another prospect is the Peace River Field. In testing for oil in flats for a distance of about 14 miles north of Peace River Town, heavy gas flows were struck. A well at Tar Island has a large open gas flow, and at Peace River Town the Victory well burned wide open for several years.

USE OF NATURAL GAS DROPS WHILE THAT OF MANUFACTURED GAS RISES

Use of natural gas, as reported by 90 companies in the United States, was 3.9 per cent less in volume during the first five months of 1930 than it was in the same months of 1929, according to figures made public by the American Gas Association. Revenues decreased 2.5 per cent. Consumption of manufactured gas increased 2.4 per cent and revenues increased 1.6. The 90 companies upon whose business the A.G.A. figures were based are said to represent more than 70 per cent of the public utility distribution of natural gas.

Both groups of companies gained in number of consumers at the end of May in comparison with a year ago. The manufactured gas companies had 8,900,000 accounts on their books as against 8,273,949 a year ago, or an increase of 2 per cent. Natural gas companies had 3,733,627 customers, in comparison with 3,643,491 a year ago, an expansion of 2.5 per cent.

The 148 manufactured gas companies upon whose reports the A.G.A. figures in that group are based had for the first five months of this year gross revenues of $166,497,698, an increase of 1.6 per cent over the $163,902,449 for the corresponding period of 1929. Their production and purchase of gas totaled 170,677,083,000 and 168,223,698,000 feet, respectively, an increase of 1.5 per cent. May statistics revealed declines of 0.6 per cent in revenues and 0.1 per cent in the total gas produced and purchases.

Revenue of $108,295,125

Revenues of the 90 natural gas companies for the first five months of 1930 aggregated $108,295,125, as compared with $111,118,305 in the corresponding period of last year, a decrease of 2.5 per cent. Their production and purchase of natural gas amounted to 298,850,913,000 and 300,374,399,000 cubic feet, respectively, a loss of 0.5 per cent. Commercial sales, both in volume and revenue, showed increases of more than 4 per cent, but the general business recession was reflected in declines of 7.8 per cent in revenue and 9.8 per cent in volume sales to industrial users. Consumption for domestic purposes declined 1.8 and 1.5 per cent, respectively.

The May statistics show substantial declines in sales. The volume was 31,672,143,000 feet, as compared with 35,473,437,000 in the corresponding month of 1929, a loss of 11 per cent, while revenues totaled $16,622,953, a loss of 7.7 per cent in comparison with the total of $18,007,943 a year ago.

Wisconsin Companies Fare Well

The eight Wisconsin companies reporting, comprising 91 per cent of the total sales of manufactured gas in that State, fared much better than the country as a whole. The number of customers increased 4.4 per cent in the last year to a total of 291,795. May gas sales showed gains of 3.4 per cent in volume and 4.8 per cent in dollars, while the increases for the first five months were 3.8 and 4.5 per cent, respectively. The reports also disclose the fact that the companies are turning largely to coke-oven gas, while water gas is losing ground rapidly.

That there will be a decided increase in the use of natural gas and a smaller consumption of the manufactured product in the next year is indicated by the numerous large pipe-line projects which are under way, involving expenditures of hundreds of millions of dollars.

GAS FLOW SHUT OFF IN CASE OF LEAK IN LINE

HOUSTON, Tex., Aug. 4.—A. B. Elkins of this city has invented what he calls a "no-gas-explosion" device. This small attachment to the gas meter will automatically shut off the gas flow over the entire house, he says, when any kind of leak is opened in the pipes or in case a jet should go out. At the same time, an electric bell will ring, warning the persons in the house that there is a leak which should be fixed. To offset the possibility that the bell is not heard or should fail to ring, an electric light also flashes on. This light may, of course, be installed any place in the house.

The mechanism of the explosion preventer appears to be simple. It is "set" by pulling a chain or string, which comes out of the meter in which the device is installed.

ACQUIRES DELPHOS GAS CO.

The Midland United Co. has acquired the Delphos Gas Co. of Delphos, Ohio. The Midland United Co. already controls the West Ohio Gas Co., serving Lima, Ohio, and other cities in that section of the State, and a gas pipe line will be laid between Lima and Delphos interconnecting the two properties.

FARLEY ASSISTANT SECRETARY

L. C. Farley, formerly of San Antonio, Tex., a pipe line operator of many years standing, has been elected assistant secretary of Southwestern Natural Gas Co., subsidiary of Appalachian Gas Corp., according to announcement by H. G. Scott, president of the company.

TURNER VALLEY STORAGE DEMANDS HIGH PRESSURE

CHATHAM, Ontario, Aug. 11.—Attention is being turned by oil operators to attempts being made to store waste gas from the Turner Valley Field in the depleted sands of the Bow Island Field. The task is reported as more difficult than originally supposed, owing to water encroachment into most of the field and to the bad mechanical condition of many of the wells.

On account of water, which has displaced the gas in many parts of the field, it has been found necessary to use a much higher pressure than was originally planned to force gas back into the sand.

Many of the wells in the field are being abandoned and plugged, others are being repaired and those in the best condition are being utilized as intake wells.

It has been found necessary to install a compressor with a daily capacity of 50,000,000 cubic feet daily to handle the work.

PLAN TO BUY GAS SYSTEM

BIRMINGHAM, Ala., Aug. 11.—An agreement to purchase the gas distribution system in Talladega and serve natural gas in that city has been reached between the officials of Talladega and the Alabama Natural Gas Corp. The purchase must be approved by the voters. It will be necessary for the Alabama Natural Gas Corp. to construct a lateral line from the main line near Pell City south to Talladega and it will also be necessary to rebuild the service lines in Talladega.

Company Permitted To Bill Its Patrons on Basis of Heat Units

CHICAGO, Aug. 11.—The Illinois Chamber of Commerce has authorized the Peoples Gas, Light & Coke Co. to bill its customers hereafter on the basis of the heat units contained in the gas (the therm basis), rather than on the number of cubic feet of gas consumed each month, as proposed in the rate schedules filed by the company with the commission on June 11.

This authorization makes no change in the heating value of the gas furnished by the company and makes no change in the cost of gas service to the customer. In other words, as stated in the commission's order, it "constitutes merely a change in the style of billing."

The present cubic foot rates will be continued in effect as optional, so that any customer desiring to do so, may continue to receive his bills calculated upon the basis of the cubic feet of gas used.

This change in the method of billing for gas is made at this time in anticipation of the time when the gas supply of Chicago will be augmented sometime in 1931 by natural gas from the Texas Panhandle Field.

The company's product then will be a mixture of natural and manufactured gas and, because of its substantially higher heating value, charging for it on a therm basis will be altogether more scientific and accurate.

WAINWRIGHT PRODUCERS LOOKING FOR A MARKET

CHATHAM, Ontario, Aug. 4.—Producers in the Wainwright Field, east central Alberta, are interested in the prospect of a market for their incidental natural gas production. Several tests drilled in this area have obtained gas in large quantities, and recently operators have been approached with regard to sale of their gas production. C. O. Moore and associates who are planning to deliver natural gas to the Saskatchewan cities are understood to have agreed tentatively to take at least 25 per cent of their requirements from the Wainwright Field. These interests also are negotiating for the production in the Kinsella Field controlled by the Duluth Oil & Gas Co. A ready market for natural gas production would do a great deal to stimulate drilling activity in the east central Alberta areas.

PLANS DRILLING CAMPAIGN

The Tri-City Gas Co., representing New York and Texas interests which has applied for a natural gas franchise for Saskatoon and other Saskatchewan cities, is reported planning to carry on an extensive drilling campaign in east central Alberta if the franchise is granted. It is understood that drilling operations will center in the Kinsella gas area, where the Duluth Oil & Gas Co. has already finished one gas well with an estimated production of 24,000,000 feet.

SAXET GAS CONTRACT

Saxet Gas Co. has closed a contract to supply Southern Gas Co., a subsidiary of United Gas Corp., with a minimum of 4,500,000 feet of natural gas a day. This gas will be used to augment the supply for the main line of the Southern Gas Co. to San Antonio and Austin, Tex. Delivery will commence shortly on completion of an extension to the Saxet company's reserves in Refugio County, Texas.

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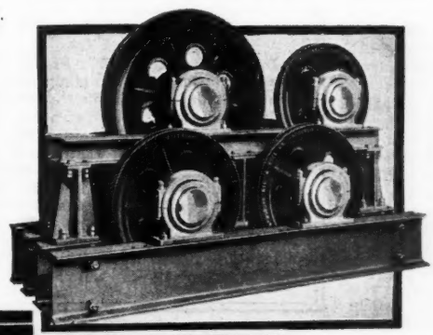
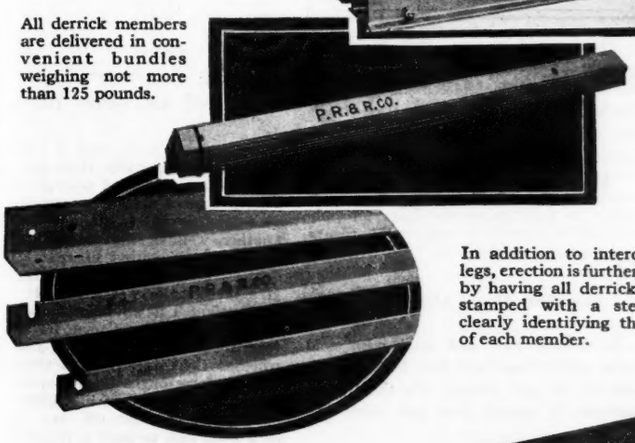


A Parkersburg Roller Bearing Crown Block makes a perfect combination with Parkersburg Steel Derricks. These new Crown Blocks are a quality product designed to meet all oil-field requirements. Built in single and double-deck types, with self-aligning roller bearings with positive acting Alemite lubrication. Manganese Sheaves are optional. These Parkersburg Crown Blocks stand the severe test of deep drilling service.

All derrick members are delivered in convenient bundles weighing not more than 125 pounds.



In addition to interchangeable legs, erection is further simplified by having all derrick members stamped with a steel stencil clearly identifying the location of each member.

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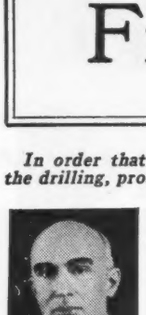
Field Problems and Their Solution

EDITED BY THOMAS F. SMILEY

In order that men connected with the drilling, producing and transporting branches of the petroleum industry may procure quickly a solution of many problems confronting them from time to time in their work, The Oil and Gas Journal has arranged with leading engineers and other recognized authorities to answer questions submitted by readers of this publication pertaining to the work of drilling and producing crude oil and transporting this product.



Everyone is invited to submit questions freely. These questions will be submitted to proper authorities by Mr. Smiley, who edits the page, and answers, based on the best available information, will be published. Each question should give as much detail as possible, especially where it relates to matters where depths of sands, types of sands and operations on adjoining properties would have a bearing on the problem involved. The source of all questions will be considered as confidential and only initials will be published in connection with the question.

In this connection, The Oil and Gas Journal will be glad to publish articles from field men who have devised new methods or practices which are improvements.

In case an immediate answer is important, one will be given by mail if the writer requests it.

SOUR CRUDE ENDANGERS LIFE

Much has been written about the damage to machinery resulting from the corrosion caused by hydrogen sulphide gas, but I never have read anything about this gas being a menace to human life. Surely it must be. If it ruins oil field equipment as I have read that it does, it certainly must have a very bad effect on the health of workmen. Can you tell me whether any deaths have been directly attributed to this poison?—N. S. H.

Not only is the hydrogen sulphide gas encountered in the Texas Panhandle and Permian Basin recognized as a serious menace to health but it has been the direct cause of deaths. In a paper read before the Texas division of the National Safety Council, V. H. Hayslip, of the Humble Oil & Refining Co., stated that since that organization has started producing, transporting and refining sour crude six of its workmen had lost their lives through hydrogen sulphide gas. As a result of these casualties the company put the following rules into effect:

"1. No man shall be allowed to go upon or in the near vicinity of any tank containing sour crude unless he is wearing a gas mask and is accompanied by another man who shall stand upon the fire wall where he can keep the first man in view at all times. The second man also shall be equipped with a gas mask and shall be ready to go to the assistance of the first man if the necessity arises.

"2. No man shall be allowed to enter a tank, building or any other enclosed place where hydrogen sulphide gas may be present without wearing proper breathing equipment, safety belt and life line and without being accompanied by another workman who shall stay in the open where he can go to the first man's assistance if necessary.

"3. Every man working in the vicinity where sour crude is produced or is being handled shall be instructed in the Schaefer method of artificial respiration.

HOW MUCH GAS IS RETURNED?

In the repressuring of old oil fields or in experiments with this method of production has it ever been found out whether you can put back into the sand as much gas as you took out in the first place by the ordinary method of producing the wells?—G. E. N.

Information available points to the improbability of replacing in depleted oil sands a volume of natural gas equal to that previously removed. Prof. L. D. Roberts of the Colorado School of Mines says on this subject:

"Data on repressuring operations in certain Texas fields indicate but do not show definitely that it is impossible to return to depleted or partly depleted sands a volume of gas equal to that previously removed. Four geologic factors are believed to be responsible, at least in part, for the apparent difference between the volume of gas taken out of the formations and the volume of extraneous gas which ordinary repressuring operations return to the sands.

"These factors, arranged in the order of their importance are (1) time, (2) water encroachment, (3) slumping, and (4) recementation.

"Although the time factor is of paramount importance in repressuring operations, petroleum engineers have been disposed to treat it too lightly. It must be remembered that during the early life of a field, gas is withdrawn from the reservoir sands through a relatively large number of wells, whereas during repressuring the ratio of injection wells to producing wells is from one to five, or greater.

"In order, then, to repressure a field where there is but one injection well to every five or more producing wells it would be necessary to return gas to the reservoir formation at a rate at least five times greater than that at which the gas was originally produced from the average well. Since the flow of gas through a restriction or opening between two reservoirs—one of which is the well and the other the pore spaces in the reservoir sands—varies as the square root of the differential pressure and as the absolute static pressure, it is evident that there is a maximum rate for a given injection pressure and number of intake wells at which a field can be repressured.

"The volume of gas which a depleted or partly depleted sand is capable of taking during a given period is dependent also upon the character of the reservoir formation. Every formation contains streaks of more or less loose and tight sand. The loose streaks fill with gas rapidly, but it takes time to fill the voids in the tighter portions of the sand. If injection pressures are maintained for a sufficient length of time, it should be possible, provided of course that the pressures are as high or higher than the original formation pressure and other shrinkage factors do not interfere, to return the original volume of gas to the reservoir sands. The distribution of energy and pressure in a depleted sand is a slow process at best. It can be hastened to some extent by increasing the injection pressure or by using a large number of injection wells; but in any event a long time, and in the average reservoir sand perhaps years, will elapse before original conditions can be restored.

"That 100 per cent return of gas to the reservoir, even where sufficient time has been allowed, is not always possible in depleted oil sands is sometimes due to water encroachment. Water which has migrated into the depleted areas of a sand reduces appreciably the volume of pore space available for injected gas.

"Slumping of the sand formation is held by some engineers to be a factor in reducing the pore spaces in reservoir sands and is considered by them to be one of the reasons why certain formations did not take as much gas as they held originally. In a producing formation having a high initial pressure and no edge water, it is probable that subsidence may contribute to pore space shrinkage on depletion of the oil and gas from the formation. High-pressure fields without edge water, however, are of rare occurrence. In those fields which are surrounded by edge water, as, for example, the Gulf Coast fields in Texas and the majority of the fields in California, slumping of sand formations after the extraction of oil and gas seems but a remote possibility. In considering reservoir sands which are surrounded by edge water many engineers are of the opinion that if the pressure of the overlying formations was great enough to compress the depleted sand bed the pressure would be more than enough to supply the required differential between the water and the depleted sand to cause the water to replace the extracted gas and oil before compression of the sand took place.

"Although recementation in the reservoir sands has been offered as a possible factor in pore space shrinkage, no substantiating data for or against this theory are available at this time."

WHY WAS IT CALLED THAT?

JAMIN EFFECT

Jules Celestin Jamin, French physicist, who made a study of compressibility of liquids, capillarity, and other subjects, noted the resistance offered to flow by alternating globules of liquid and bubbles of gas in channels of capillary dimensions. So this phenomenon was named after him and called "Jamin effect." Don't make the mistake of pronouncing his name the way it is spelled, but say, or try to say, Zha-mang.

TESTING IRON AND STEEL

In testing iron and steel with acid what acid is used and how is it used in making the test, please? Are there other methods of testing iron and steel?—N. G. N.

Tests of iron and steel are made with acid and by fracture. Nitric acid, diluted slightly with water, is used in making tests. Its application to the polished surface of medium-carbon and high-carbon steel causes a darkening of the surface. The higher the carbon content the more pronounced will be the darkening effect. The action of the acid is much slower in the case of low-carbon steel and wrought iron and in both cases the darkening effect of the acid is relatively slight. The acid test is employed principally to distinguish low-carbon steel or wrought iron from steel with higher carbons, say .4 or more.

Indication of the grade of iron and steel is afforded by fracturing samples after nicking, although this method of testing is not regarded as conclusive. Wrought iron and certain grades of low-carbon steel break with a fibrous structure. The grain is coarser in low-carbon steels and finer in high-carbon steels, but the appearance is affected much by heat treatments or cold working.

PERCENTAGE OF DRY HOLES

Are statistics in existence to show just what proportion of the total number of oil and gas wells drilled in Kansas are dry? Are there any records to show whether the percentage of dry holes in that State is growing larger or not? What has been the trend of production, please; that is, total production and the average production per well?—N. S. E.

Records for the 10 years ending with 1929 show a generally, though irregularly, increasing percentage of dry holes in Kansas. The percentage of dry holes for 1929 was almost exactly twice that of 1920—42.8 in 1929 as compared with 21.8 in 1920. Production figures for the same 10 years, both total and average per well, have been erratic, without a clearly defined trend, though the average per well was 299.4 bbls. in 1929, in contrast with 78.1 bbls. in 1920. Here are dry-hole figures for a decade:

	Oil wells	Gas wells	Total completions	Dry holes	Dry holes per cent
1920	2,327	147	3,164	690	21.8
1921	909	118	1,380	353	25.6
1922	1,057	86	1,640	497	30.3
1923	807	63	1,405	535	38.1
1924	650	79	1,125	396	35.3
1925	1,281	86	2,003	636	31.7
1926	1,458	96	2,338	784	33.5
1927	685	79	1,333	569	42.8
1928	587	115	1,157	455	39.3
1929	553	52	1,058	453	42.8

Production figures (in barrels) for the same years follow:

	Total initial production	Average initial production per well
1920	181,845	78.1
1921	96,789	105.3
1922	74,391	70.4
1923	61,372	76.0
1924	92,668	142.5
1925	207,880	162.2
1926	173,664	119.1
1927	98,253	143.4
1928	101,043	172.1
1929	165,611	299.4

DRILLING RECORDS IMPORTANT

There seems to be need of a better record of drilling wells than any I have seen. It has happened several times that I have wanted certain information about a completed well to guide me in drilling another well in the same field, and I found that the kind of report kept by drillers in this region usually fails to give me the facts I want. It looks to me as though it would be a good plan to have a regular blank form for the driller to fill out every day. Can you tell me whether there is any such thing? Such a blank form ought to give space for the casing record, kind of bits used, the formations passed through, etc. It would be a good idea to have a complete report on time, too. I am getting up a form for my own use, but if there is a better one I would like to know about it, for it seems to me that these drilling records are often very important.—O. S. E.

There are a number of printing companies who make a specialty of supplying forms for all kinds of records needed around drilling or producing wells, transportation operations and refineries.

Naturally they will vary in accordance with individual interpretation of the needs of each company, and it does not seem that any national body like the American Petroleum Institute has as yet endeavored to standardize these forms.

You may be interested in an article on the need of accuracy in field records prepared by Harold Vance, consulting geologist, Midland, Tex., that appeared in The Oil and Gas Journal on page 94, April 4, 1929. Mr. Vance gives a good review of the general requirements for records and it may be of some assistance to you in the work you propose to do.

ROCKY MOUNTAIN AREA

(Continued from Page 59)

Byers, SE SW NE, Section 4-19-38, is bottomed at 3,945 feet and preparing to run the 6⅝-inch, and its No. 26 Terry, C SE SE, Section 9-19-38, spudded on July 28 and is drilling at 82 feet in sand. The Midwest's No. 33 State, SE SW NW, Section 4-19-38, is drilling at 3,184 feet in lime and had a show of gas at 2,785-2,800 feet and a show of oil at 3,166-75 feet. Same company's No. 4 State, NE NW SE, Section 4-19-38, is drilling at 1,250 feet in red rock and sand, and its No. 26 State, C SE NW, Section 4-19-38, cemented the 9⅝-inch at 2,775 feet. The Midwest's No. 26 State, C SE SE, Section 4-19-38, is drilling at 3,800 feet in lime and had one bailer of water per hour at 3,740-50 feet. Its No. 3 State, NW NE SW, Section 4-19-38, is drilling at 2,779 feet in anhydrite and lime. It had a show of oil at 3,170-74 feet and shows of oil and gas at 3,704-30 feet.

The Ohio Oil Co.'s No. 2 State, SE cor. SW, Section 30-18-38, is rigging up rotary, and its No. 3 State-Northrup, NE cor. SE, Section 32-18-38, is drilling at 3,850 feet in anhydrite and lime. Same company's No. 4 State-Northrup, NW cor. SE, Section 32-18-38, is drilling at 1,500 feet in anhydrite. It topped the anhydrite at 1,470 feet and the surface elevation is 3,636 feet.

The Prairie Oil & Gas Co.'s No. 1 Grimes, SW cor. NW, Section 28-18-38, is rigging up rotary.

Shell Operations

The Shell Petroleum Corp.'s No. 1 Berry, SE cor., Section 31-18-38, is drilling at 1,564 feet in anhydrite. It topped the anhydrite at 1,478 feet and the elevation is 3,634 feet. Same company's No. 2 State, NW SW NE, Section 32-18-38, is drilling at 3,931 feet in lime and had a gas show at 3,868-70 feet, and its No. 3-A State, SE cor. NE, Section 32-18-38, is drilling at 3,234 feet in anhydrite and had oil and gas shows at 3,140-46 feet and gas at 3,188 feet. Shell's No. 4 State, SW cor. NE, Section 32-18-38, is drilling at 2,645 feet in anhydrite. It topped the salt at 1,595 feet and bottomed it at 2,485 feet. The surface elevation is 3,637 feet. Same company's No. 1-B State, NW cor., Section 33-18-38, is rigging up rotary, and its No. 1 Grimes, SW cor., Section 28-18-38, is rigging up rotary. Shell's No. 2 Grimes, NW cor. SW, Section 28-18-38, spudded on July 27 and is drilling at 200 feet in red rock, and its No. 2 McKinley, SW cor. SE, Section 19-18-38, is drilling at 2,580 feet in anhydrite. It bottomed the salt at 2,350 feet. Same company's No. 3 McKinley, SE cor., Section 19-18-38, is building rig, and its No. 4 McKinley, SE cor. SW, Section 19-18-38, is drilling at 1,445 feet in anhydrite. Shell's No. 5 McKinley, NW cor. SE, Section 19-18-38, cemented the 12½-inch at 253 feet. It spudded July 25. Its No. 6 McKinley, NE cor. SW, Section 19-18-38, spudded July 26 and is drilling at 126 feet in red rock, and its No. 7 McKinley, NW cor. SW, Section 19-18-38, is building rig.

The Skelly Oil Co.'s No. 1 Fowler, NW cor., Section 31-18-38, is drilling at 1,530 feet in anhydrite. It topped the anhydrite at 1,494 feet. The surface elevation is 3,650 feet.

The Sun Oil Co.'s No. 1 McKinley, C NE NE, Section 5-19-38, is drilling at 4,015 feet in lime.

The Texas Production Co.'s No. 1-C State, NE cor., Section 25-18-37, is bottomed at 3,970 feet and fishing, and its No. 1 McKinley, NE NW SW, Section 4-19-38, is bottomed at 2,869 feet in lime and anhydrite and repairing rig. Same company's No. 1 Selman, NW cor. SE. Section 15-19-38, is drilling at 4,000 feet in lime. The 7-inch was cemented at 3,906 feet.

The Texas Pacific Coal & Oil Co.'s No. 2-G State, NE cor. SE, Section 24-18-37, has rig completed.

The Tidal Oil Co.'s No. 1 Hardin, SW cor. NE, Section 19-18-38, is drilling at 765 feet in the red beds, and its No. 2 Grimes, SW SE NE, Section 29-18-38, is standing with the 15½-inch cemented at 220 feet.

Caprock Area—Lea County

The Western Drilling & Engineering Co. is rigging up for its No. 1 Bridges, a joint operation with the Texas Production Co., in the SE cor. NW, Section 17-17-34, on the western side of Lea County and in an area which will make it an especially interesting test. It is located 3½ miles west of the Vacuum Oil Co.'s No. 1 State, in the center of the section line between Sections 13 and 14-17-34 ,which was completed two years ago at a total depth of 4,900 feet with an initial production on the pump of 120 bbls. per day. The Vacuum company's discovery indicated a pool in that area, but no drilling has since been done which would outline the productive territory. The nearest well drilled in the opposite direction was Inglefield & Bridges' No. 1 State, SE cor., Section 4-17-34, 2 miles northeast of the new location, which was drilled in 1927 to a total depth of 5,344 feet and abandoned though it showed for a small producer at 4,675-4,745 feet.

Eunice Area—Lea County

The Tidal Oil Co.'s No. 1 Colman, SW cor. NE, Section 17-21-36, is drilling at 3,752 feet in lime, and the Ohio Oil Co.'s No. 1 State-McDonald, NW SW, Section 15-22-36, is coring in lime at 3,524 feet. The last named well had some oil at 3,290-3,300 feet and gas at 3,306-12 feet. George F. Getty, Inc.'s No. 1 State, NE cor., Section 19-21-36, is drilling at 1,730 feet in anhydrite and salt. It topped the salt at 1,430 feet. The surface elevation is 3,626 feet.

Cooper Area—Lea County

The Texas Pacific Coal & Oil Co.'s No. 5-A State, C E half NE, Section 20-23-36, is drilling at 3,744 feet in gray lime.

Jal Area—Lea County

The Midwest Refining Co.'s No. 19 Farnsworth, SW SW, Section 14-26-37, is drilling at 3,000 feet in lime.

Eddy County

Lockhart & Co.'s No. 2-X Parke, NE NW NW, Section 23-17-30, Maljamar area, is bottomed at 2,925 feet and running the 6¼-inch. This firm has made a location in the Pearce Canon district in its No. 1 Livingston, SW SE, Section 23-24-29. R. D. Compton's No. 2 Compton, SE SE, Section 5-18-27, is drilling at 300 feet. Flynn, Welch & Yates' No. 58 State, NW cor. SE, Section 19-18-28, Artesia area, is drilling at 1,975 feet.

Quay County

Samuel T. Silverstein and others' No. 1, Section 29-12n-33, is rigged and ready to spud. The location is 19 miles east and a little to the north of Tucumcari.

McKinley County

The Walker Dome Oil Co.'s No. 2, SE cor. NE, Section 14-15n-10w, Walker Dome, is shut down at 1,014 feet with 350 feet of oil standing in the hole.

San Juan County

The Rio Grande Development Co.'s No. 2 Lanier, SE NW, Section 9-29-11, Aztec district, set pipe at 1,280 feet and is resuming with the Picture Cliff as the next objective.

WYOMING

Natrona County

The Midwest Refining Co.'s No. 11 Middy, C NE NE, Section 23-35-79, Midway Dome ,being drilled for the joint account of lease and permit holders under a co-operative group development plan, is standing with the 9⅝-inch cemented on top of the second Wall Creek sand at 5,157 feet. Last week 30 feet of sand was cored in this well and showed saturation. It is planned to drill out the cement this week. While company officials are optimistic as to the possibilities of a good well, there is a tendency towards conservatism until the sand is actually tested. There was a sand at 5,112-24 feet which at first was believed to be the second Wall Creek, but upon finding a true sand at 5,157 feet this opinion has been discarded.

The outcome of this test is eagerly awaited all through Wyoming and especially in Casper for the reason that if another light oil field is opened close to the big Casper refineries it will insure ample crude oil supplies for the future and go a long way to restore the conditions which prevailed in the earlier days of the Salt Creek Field. It will depend to a large extent upon what is found in the second Wall Creek as to whether the hole will be carried on to the deeper horizons which were the original objectives of the test.

The Midwest Refining Co.'s No. 29-DT. NW, Section 35-40-79, Salt Creek, the test to the granite, is bottomed at 4,930 feet and standing with the 6⅝-inch cemented. It is through the Madison lime and in the top of the Deadwood, the last formation to be tested. The Deadwood is estimated to be close to 1,000 feet thick and in the only place in Wyoming where it has been drilled; it had several good sands capable of serving as reservoirs for oil.

The Chicago Oil Co.'s No. 3, SW, Section 1-33-83, Poison Spider district, was out of the Madison lime at 3,248 feet and is drilling in the top of the Deadwood at 3,250 feet. This test will be carried to the granite. The Golden West Oil Co.'s No. 1 State, Section 36-36-81, Segment Basin, is spudding. The Muddy is expected at 1,100 feet and the Embar at 2,500 to 3,000 feet.

Fremont County

Several of the wells in Fremont County are at critical stages and will be closely watched during the next few weeks. One of these is the Producers & Refiners Corp.'s No. 10, NW cor., Section 14-32-95, Sand Draw Field, which is drilling out cement at 3,381 feet. Total depth is 3,426 feet, at which point the 10-inch casing was cemented. Attempts have been made on several occasions in the last 10 years to drill through the gas sands in the Frontier formation and test the underlying sands in the Dakota.

This well is the first to get below the Frontier and it is believed to be on top of the Muddy, the first sand in the Dakota series. It is located only one-fourth of a mile from a well drilled by the Producers & Refiners last year which was completed at 2,978 feet with an initial production of 70,000,000 feet of gas per day. It was intended as a test to the Dakota but the hole went crooked and it stopped before reaching that horizon. When drilling was suspended there were reports that the hole was showing a little oil at the bottom. There has been a general belief that some of the deeper sands contain oil and this possibility has spurred the operators on to greater efforts to get through the gas belt.

The Producers & Refiners' No. 2, SE NW, Section 33-34-92, Muskrat Dome, is drilling at 3,760 feet in shale and still has several hundred feet to go to reach the Frontier in which the gas was found in the discovery well. The Texas Production Co.'s No. 1 State, SW SW, Section 36-34-95, Alkali Butte, is drilling at 4,469 feet and still blowing gas from the Dakota. It is probably through the Lakota. The Kinney-Coastal Oil Co.'s No. 1 Dykeman, SE SW, Section 22-3n-1w, Pilot Butte, has about reached old bottom at 3,735 feet and ready to begin making new hole. The Lakota is the next objective. It had a big flow of gas in the Muddy.

The Delta Oil Co.'s No. 1 Enos, Section 27-3n-1w, Pilot Butte, an operation not heretofore reported, is drilling at 615 feet. The Enos tract, which is well located on the dome, was drilled on two former occasions, one well going to 1,100 feet and the other to 2,000 feet, being put down by the Pilot Butte Oil & Gas Co., which is reported to have been reorganized. P. B. Dykeman and associates are reported to have spudded in a well in the Elk Basin Field at the edge of the Red Desert. Several years ago the Prairie Oil & Gas Co. drilled in the Red Desert country, but abandoned the field after having encountered considerable gas, but no oil, for which it was looking. Dykeman and associates propose to develop the gas. Last year they drilled on Section 18-27-95, and got a 5-bbl. oil well instead of gas. The depth was 1,100 feet.

Carbon County

The Producers & Refiners Corp.'s No. 3, SE NW, Section 2-19-88, Hatfield Dome, is bottomed at 4,128 feet, at which depth the water was blown out of the hole. It is preparing to lubricate. The 4½-inch is at 4,085 feet. This was a gas well in the Dakota at 3,956 feet in 1927, making 3,000,000 feet a day. Two years ago drilling deeper started with the intentions of going to the Sundance. It had all kinds of trouble at 4,003 feet and did not make any new hole until a month ago. It picked up another sand at between 4,066 and 4,085 feet. Same company's No. 16, Section 25-26-87, Ferris Dome, is shut down at 3,175 feet waiting for orders. The 8¼-inch is at 2,072 feet. This is an old well being deepened from 2,705 feet. It was in the red beds at 3,100 feet. Same company's No. 4, Section 7-26-89, Wertz Dome, is bottomed at 3,386 feet and fishing for tools. This is a gas well being deepened.

The California-Wyoming Oil Co. is moving in for a well on Section 29-23-88 on what is known as the Willows Dome in the Buck Springs district. The Dakota is expected at 2,000 feet. Harold L. Nutting, a pioneer oil man in that district, is general manager. The location is 18 miles south and a little east of the Little Lost Soldier Field. Dr. F. F. Hintze reported on the structure. C. E. Bivens and others' No. 1 Red Feather, NE SW SW, Section 36-13n-92, Baggs Dome, is drilling at 385 feet. It is headed for the first gas sand found in the discovery well at around 765 feet.

Niobrara County

The Argo Oil Co.'s No. 7 Wehopeso, SW NW, Section 19-39-60, Mule Creek, is drilling at 2,890 feet in hard white sand in the Tensleep with water in the hole. The water was found above and below the flow of 500,000 feet a day of noninflammable gas.

Weston County

Pipe line runs from the Osage Field continue to show an increase due to the greater activity in the past few months resulting in a number of good completions. Total runs for July amounted to 32,500 bbls., which compares with 24,500 bbls. in June and 22,530 bbls. in May. Several acreage deals in that area have been reported the past few weeks. Portland, Ore., interests identified with the Yellowstone Petroleum Co., have taken over the holdings of W. R. Harris at Clay Spur consisting of 120 acres with 10 wells producing from the shale. The consideration was not announced. Iron & Lockwood have acquired 480 acres in Section 12-46-64, and contracted for a well to be drilled immediately. The location has not yet been staked.

There were no completions reported for the week. Rhinehart and others' No. 1 LAK Ranch, 2½ miles up Stockade Beaver Creek from the ranchhouse, has spudded in and shut down. The Lambie Oil Co.'s No. 2 Bock, SW NE, Section 14-46-64, is drilling at 1,300 feet, and James McCullough's No. 2 Logan McCullough, NE NE, Section 23-46-64, is drilling at 700 feet. The Osage Trust Co.'s No. 4, NE NW SW, Section 14-46-64, is drilling at 1,400 feet, and its No. 5, NW NE SE, Section 14-46-64, is drilling at 600 feet. Same company's No. 6, SW cor. SE, Section 14-46-64, is drilling at 400 feet, and its No. 7, CNL NW SE, Section 14-46-64, is moving in machine. Curtis & Straitiff's No. 3 Updike, SW SE NE, Section 14-46-64, is drilling at 400 feet, and Carl Cundy's No. 1, NW NE, Section 31-46-63, is running casing at 1,230 feet. Tom Don's No. 4, NW SE, Section 20-46-63, has sand at 1,146-52 feet (corrected) with oil and gas shows and is drilling deeper. Henderson, Garbereck and others' No. 1 Bock, SW cor., Section 2-46-64, is drilling at 1,200 feet, and Dornacher and others' No. 2, SE SE, Section 12-46-64, is drilling at 1,200 feet. Bradley-Manuel's No. 10, SE NW, Section 20-46-63, is rigging up.

Park County

The California Exploration Co.'s No. 2, NW NE, Section 14-48-102, Pitchfork Dome, is drilling at 3,744 feet in hard lime. It was a small well in the Embar and below that formation. The Midwest Refining Co.'s No. 31 Rosenberg, SW SE, Section 24-58-98, Frannie Dome, is drilling at 2,145 feet with the 10¾-inch at 2,129 feet, and its No. 31 Frannie Oil, SW NE, Section 25-58-98, is drilling at 2,778 feet in hard lime. The Yellowstone Petroleum Co.'s No. 1, NW NE SE, Section 7-57-97, South Frannie, is bottomed at 3,896 feet in the Madison lime where it had a show of oil. A packer was run to shut off water, but this was not successful and when an attempt was made to pull the tubing with the packer, it dropped, leaving the packer and one joint in the hole. The Resolute Oil Co.'s No. 1, SW NE, Section 17-57-101, Badger Basin, is drilling at 6,200 feet with 2,000 feet of open 8-inch hole. The Cody Petroleum Co.'s No. 1 Danker, SW cor., Section 22-57-98, Polecat Dome, is trying

to drill up casing. Total depth is 3,340 feet. The Texas Production Co.'s No. 1 Freeman, NW SE, Section 30-51-100, Oregon Basin, is bottomed at 3,486 feet. The bit has been recovered and an attempt is being made to establish circulation. The Continental Oil Co.'s No. 26 Elk 2, SE NE, Section 24-58-100, Elk Basin, is drilling at 1,960 feet in gray shale.

Hot Springs County

The Midwest Refining Co.'s No. 8 Weeks, NW SE. Section 6-44-98, Wagonhound, is drilling at 2,725 feet in the red beds.

Big Horn County

The Producers & Refiners' No. 3 Government, NW NW, Section 24-56-98, Garland Dome, joint with the Kinney-Coastal Oil Co., is shut down at 4,234 feet waiting for orders. It has been in the top of a sand at this depth for several months with a bad fishing job. Gas was encountered in the Embar and Tensleep and recent efforts were directed toward clearing the hole and drilling on down to the Madison.

Lincoln County

The Midwest Refining Co.'s No. 1 Larcher, SE SE, Section 25-37-117, Little Grays River, is drilling at 2,235 feet in red lime.

Uinta County

E. L. Doheny and others' No. 1, C SE, Section 6-14-118, Aspen structure, is bottomed at 3,000 feet and waiting for rotary equipment to be used to drill up a string of tools.

COLORADO

Archuleta County

A wildcat drilling on the Chromo Dome in Archuleta County, in the southwestern part of Colorado and just north of the New Mexico boundary, attracted some attention this week when it encountered a good show of oil and gas. The well is the Standard Oil Co. of Colorado's No. 1 Fitzhugh, NW SE SW, Section 34-33n-1e, located 22 miles southeast of Pagosa Springs. The first show of gas was in shale at 260 feet. At 310 feet there was a larger show, estimated at 100,000 feet a day, and was followed by some oil coming into the hole. At last reports it was drilling ahead at 314 feet and continuing to bail small quantities of oil. The crude is reported to be green oil with a paraffin base and approximately 32° gravity. The identity of the horizon is not certain, but the driller says it is the Benton shale and that the first sand in the Dakota is expected within the next 200 to 300 feet. The well commenced spudding on July 6 in a test to the Sundance. The surface is the Mancos shale. The company has 18,000 acres on the structure covering two domes, both of which are in an escarpment entirely surrounding the area and rising 400 to 500 feet above the surface. H. L. Oliver did the geological work for the company and several spreads were sold to major companies. The location is 5 miles west of an oil spring which has been making around 1 bbl. of oil per day as far back as the records go.

Dolores County

The Transcontinental Oil Co.'s No. 1 Glade, C NW, Section 30-41-16, is reported drilling at 6,747 feet in shale that is caving badly. It is probably below the Pennsylvanian and has considerable open hole.

Huerfano County

The Ojo Exploration Co.'s No. 1, Section 5-29-69, which is exploring an area around the Ojo oil seep, is drilling at 212 feet. At 151 feet it was in a shale formation with streaks of sand which contained slight oil shows. After some testing it was decided to core and the samples indicated that the formation was standing almost on end. While the bed was only a few feet thick, apparently, it took 15 to 20 feet of drilling to get through it on account of its position. It then went into black shale. Whether the formation was Cretaceous or Pennsylvanian is uncertain, though tests are being made of the samples in an effort to identify it.

La Plata County

The Murchison Oil Co.'s No. 1 Doesher, SW cor. NW, Section 29-33n-13w, Dry Mesa structure, commenced spudding July 22 and is drilling at 250 feet. This is to be a Pennsylvanian test and is being drilled with rotary equipment. The company is controlled by the same interests as the Southern Union Gas Co., which is carrying out an extensive gas transportation program in New Mexico and western Colorado. The Detroit Oil Association's No. 1 Olbert, NW SW, Section 9-35-12, Thompson Park, is reported preparing to complete following the sale of a controlling interest held by E. B. Klem. The hole is bottomed at 2,623 feet just above the Sundance sand. It had passed through an 80-foot dry sand and casing will be set before resuming. The McGarr Petroleum Co.'s No. 1 Red Mesa, SE NE, Section 27-33-12, is drilling at 2,171 feet.

Montezuma County

The Mesa Verde Ranch Co.'s No. 2 Haller, NW SE, Section 33-36-14, Mount Lookout structure, is drilling at 600 feet. It is headed for a sand in the Dakota which was found at 740 feet in No. 1 Haller, three-fourths of a mile to the northwest.

Mesa County

The Argo Oil Co.'s No. 1 Hoel, NE cor., Section 23-8s-104, High Line, is cleaning out in an 8-inch hole at 2,750 feet. The original total depth was 3,000 feet and it was plugged back in an effort to overcome casing trouble. Total depth of redrilled hole is 2,760 feet.

Rio Blanco County

The Magnolia Petroleum Co.'s No. 1-A Fordham, NW SW, Section 9-2s-96, Piceance Creek, is plugging back from a total depth of 5,130 feet to test upper gas horizons. Officials of the company are expected to inspect the well this week to determine upon future proceedings. Under the terms of the permit which was extended some time ago permission was granted for the drilling of one well only prior to next February. Decision to future operations will depend largely upon the showing made when the present well is tested and the attitude of the Department of the Interior regarding the drilling of another test.

Park County

The South Park Oil & Gas Co.'s No. 1 Eshe, SE NW, Section 5-9s-76, Muleshoe structure, is drilling at 280 feet in the Pierre shale, at which depth a small pocket of gas was encountered. The South Park Oil Co.'s No. 1 Milligan, NE SE, Section 13-8s-76, Jefferson structure, is bottomed at 790 feet and running the 10¾-inch casing.

Douglas County

The Perry Park Oil Co.'s No. 1 Cannon, SE NW, Section 11-9s-68, is drilling at 1,380 feet in brown shale. It had a show of gas at 980 feet.

Garfield County

The Fulton Petroleum Co.'s No. 1 Smith, NE NW, Section 8-8s-102, Garmesa Dome, is drilling at 840 feet.

Baca County

The A. R. Jones Oil & Operating Co.'s No. 1 Boice Cattle, NW NE, Section 22-34-42 (Tract 30), is cleaning out after setting the 10-inch at 2,730 feet.

Jackson County

The Midwest Refining Co.'s No. 21-X Rich, NE SW NW, Section 9-6n-80, Buffalo Creek, is being abandoned at a total depth of 4,500 feet. It is through the Dakota which carried water. The location is 3 miles east of the Producers & Refiners' No. 1 Hendershot, NW SE NE, Section 2-6n-81, which is being abandoned after finding water in the Dakota at a total depth of 4,258 feet.

Jefferson County

The Ruby Hill Oil & Gas Co.'s No. 1 Braden, SE cor., Section 24-4s-69, is bottomed at 3,568 feet and running the 6⅝-inch. Casing trouble has apparently been overcome and it is expected to be making new hole shortly for the first time in several months.

Weld County

The Eastman Oil Co.'s No. 1 Steel, NE SE NE, Section 14-2n-67, northwest of Fort Lupton, is spudding in a 20-inch hole with cable tools for a Dakota test, estimated at around 4,500 feet. A. L. Mosher has the contract. The location is in the northern coal field which supplies large quantities of lignite coal for the Denver market. The formations, according to company officials, dip rapidly toward the mountains on the west and the eastern closure is a fault which is not apparent at the surface but which was definitely established in some of the coal mines to the east. It is 6 miles north and 6 miles west of the Retter Oil Co.'s No. 1 Smith, Section 14-1n-66, which has been shut down at 1,170 feet some time for financing.

El Paso County

The Utemoor Syndicate's No. 2 Carson, NW NE NE, Section 10-16-66, Fountain structure, is drilling at 965 feet.

Morgan County

The Indian Territory Illuminating Oil Co.'s No. 1 State, NE NE, Section 16-1n-57, Fort Morgan anticline, was reported drilling at 2,400 feet two weeks ago. Since then there has been no news available from any source. It was supposed to be close to the Hygiene sand which would form the first definite marker as to the horizons, but whether the sand has been encountered is not known. Drillers at the well have been instructed to give out no information.

Larimer County

C. Leonard Smith's No. 1 State, SE cor., Section 36-12n-70, Sand Creek Dome, 6 miles west of Round Butte, is spudding at 60 feet in a test of the Pennsylvanian formation. It is expected to go to around 1,500 feet. The Continental Oil Co.'s No. 1 Hoffman, SW NE, Section 23-4n-70, Deininger Dome, is drilling at 164 feet in hard sand. This probably is the Muddy. The test is headed for the sands in the Pennsylvanian formation. Same company's No. 3 Scott, SW SE, Section 6-9n-68, Wellington Dome, a producer in the Muddy at 4,280-4,345 feet, which is being deepened to test lower horizons, is bottomed at 4,566 feet and swabbing fluid and testing. It had 4,400 feet of water in sand at 4,536 feet.

Routt County

The Texas Production Co.'s No. 7 Quaintance-Hocking, NE SE, Section 18-6n-86, Tow Creek, is drilling in shale at 3,640 feet with some oil showing in the hole.

Moffat County

The Texas Production Co.'s No. 4 Wick, NW NW, Section 10-4n-91, Moffat Dome, is rigging up rotary to deepen to the Sundance. It was completed in the Dakota at 4,107 feet in 1925 with an initial production of 500 bbls. At that time the Morrison and Sundance had not been proven either on the Moffat or Iles Domes. Same company's No. 12 Knowlton, SW SE, Section 33-5n-91, Moffat Dome, is bottomed at 4,509 feet on top of the Sundance with the 6¼-inch cemented. Smaller drill pipe is being moved in. Keoughan & Myers' No. 1 State, SW SW, Section 16-4n-101, Midland Ridge, is drilling at around 1,900 feet. The formations at this location are eroded down to the top of the Tensleep and the well is a test to the Madison lime.

There have been several rumors afloat to the effect that a discovery has been made, but these have not been confirmed and little information is being given out by the operators. It is understood, however, that nothing of importance was expected until a depth of 2,300 to 3,000 feet was reached. This is the first test of these formations to be drilled in Moffat County. The Midwest Refining Co.'s No. 24 Hannewalt, SE SE, Section 4-6n-92, Bell Rock, which has been delayed at 2,908 feet since it encountered a big flow of gas just above this depth several weeks ago, is rigging up the 8⅝-inch casing. The tools run good to 2,853 feet and the end of the trouble is in sight. The Texas Production Co.'s No. 1 Berlin, SW NE, Section 19-12n-100, Bartram Dome, is waiting for cement to set after plugging back from 2,654 feet to 2,055 feet.

MONTANA

The Dry Creek well of the Ohio Oil Co., on the dome of that name in Carbon County, southern Montana, is shut down waiting for cement to set. The hole is bottomed at 5,410 feet and the 6¼-inch casing has been set on top of the Dakota sand. A showing of oil was had in the top of this sand so oil men are anxiously waiting word that the well has drilled into the sand. This well has a commercial gas supply coming from the Frontier sands through a bradenhead and this is the first test to reach the Dakota group. It is expected the well will be ready to drill in about next week. Some minor repairs to the rig will be made while the cement is setting.

The Sunburst Field has four new wells and three others that are problematical. The No. 15 Diamond McCormick on Section 33-35-2, reached the Ellis sand and found production of 100 bbls. Rice Oil Co.'s No. 11 on the Byrne lease, Section 30-35-1, had a small pumper in the Ellis, but when shot the well made a 35-bbl. pumper. The Larson & White syndicate drilling No. 7 on Section 19-35-1, also had a small well that made a 25-bbl. pumper after being shot. Crumley Jarrett's No. 5 on Section 29-35-2, found a production of 75 bbls. in the Ellis sand. Campbell Morton's No. 2 on Section 13-34-1, found nothing in the Ellis sand but will plug back to see what the gas found above will make. The California Co. on the Lorensen lease found a duster on section 28-35-2, and tried a shot without success. The Raymond interests on the DeGroat lease, Section 10-34-2, found a dry hole in the Ellis and will test the gas sand by plugging back.

In the Border Field Cosmos Petroleum's No. 2 is a producer of about 200 bbls. capacity. This well flowed over the derrick when it was brought in and it is showing less water than any previous well drilled in the field. The location also makes the Ohio Oil Co.'s Farbo well, now drilling, look good and extends the pool about a mile westward.

The Cut Bank area west of the Sunburst Field is now active and attracting much attention, six wells drilling or starting there.

The Texas Production Co.'s No. 1 Small, SW SW, Section 13-35n-6w, in the Cut Bank area north of the town of Cut Bank, northern Montana, is drilling at 1,125 feet at which depth it landed the 12½-inch casing. A producer at this location will be significant as it will prove up a large area, particularly for gas.

Rocky Mountain Production

Daily average pipe line runs from the various pools in the Rocky Mountain area for the week ending August 9:

WYOMING

Salt Creek	29,600
Frannie	140
Big Muddy	1,720
Oregon Basin	2,920
Dutton	50
Elk Basin	850
Byron	10
Warm Springs	130
Lovell	20
Ferris	30
Grass Creek	1,900
Hamilton	910
LaBarge	1,750
Lance Creek	130
Lost Soldier	1,080
Osage	750
Poison Spider	240
Rock River	2,130
Simpson Ridge	50
Teapot Dome	30
Dallas-Derby	240
Hudson	220
South Casper Creek	810
Cody	70
Total	45,860

MONTANA

Cat Creek	1,140
Kevin-Sunburst	5,850
Pondera	2,100
Lake Basin	60
Border	400
Total	9,620

COLORADO

Moffat	1,127
Fort Collins	1,241
Florence	474
Iles	1,086
Tow Creek	467
Boulder	25
Rangley	50
Total	4,410

NEW MEXICO

Hogback	400
Rattlesnake	1,250
Table Mesa	100
Artesia	590
Cap Rock (Maljamar)	775
Jal	1,417
Hobbs High	34,250
Lea City	4,717
Miscellaneous (Lea County)	320
Total	44,000
Grand total	103,890
Week ending August 2	105,507
Difference	1,664

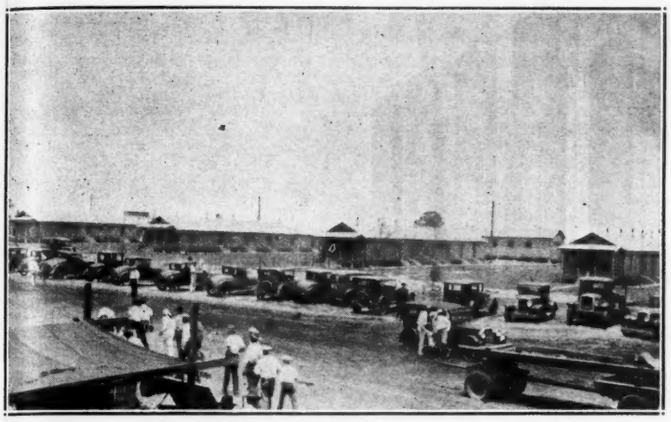
OIL WROUGHT BIG CHANGE IN VAN, TEXAS, FIELD

(Continued from Page 39)

hour test. Several other producers have also been drilled deeper to test the sand, and four wells are now pumping in the field, with several others rigged up for pumping when necessary. There are 87 producers in the field at this writing with 25 others drilling or rigging up to drill.

Pure Has Model Camp

The Pure Oil Co. has a model camp near the town of Van, and is now coming forward to aid in the erection of an up-to-date school building which will cost in the neighborhood of $50,000, and will accommodate the new scholastic population of around 440 children. This is 290 children more than last year at this time, and gives some idea as to how the town has grown. On January 1, 1929, the population of the town was 400, and the present population is around 3,000. Many of this number are Pure Oil Co. employes who live in the camp and enjoy the same conveniences as city people, for the Texas Power & Light Co. has built in lines to the town, supplying an unlimited amount of electricity. Gas from the wells in the field supplies the camp for cooking and heating purposes, and the company has erected a 55,000-bbl. steel water reservoir for an ample water supply. The water supply was formerly brought up in the "old oaken bucket," which is used generally throughout East Texas.



Part of Pure Oil Co.'s camp in Van Field.

The drouth sapped the area and caused the drilling activities to be curtailed to a great extent. However, eight miles of 12-inch line was laid from the field to the Jones farm, southeast of the pool, where there was an abundant supply of water, and activities have been resumed.

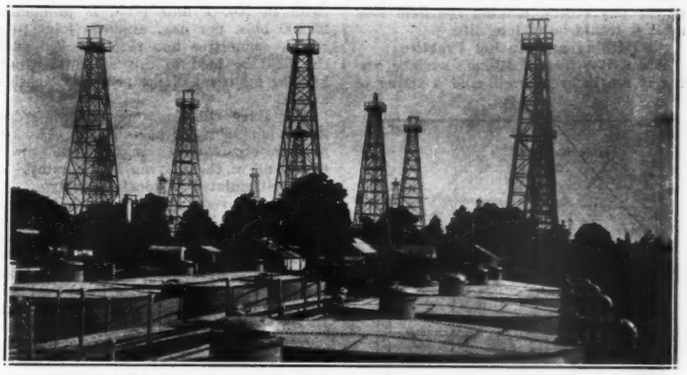
Hauling material into the Van Field has been a man-sized job heretofore, for everything had to be trucked from Chandler, about 12 miles north, over roads which were not the best, and into the sandy area where drilling is done. But the Texas and Pacific Railroad began construction on a branch line from its main line at Chandler, on April 1, 1930, and completed it July 8, the first load of freight coming into Van on that day, and the first passenger train entering a little over a week later, July 17, when the town and countryside held a big celebration, commemorating the event.

The first pipe line to be constructed out of the field was only 19 miles long, extending from the field to Chandler, on the Cotton Belt Railroad. This was a 10-inch line which transported about 8,000 bbls. of oil daily to a loading rack at Chandler, where it was loaded into tank cars and shipped to refineries which had contracted with the Pure Oil Co. for a certain amount of crude each day. One of these refineries belonged to the Houston Oil Co. at Camden, Ark., and the other refinery was located at Shreveport, La., owned and operated by the Louisiana Oil & Refining Co. The Pure Oil Co. also shipped some oil to its refinery on the Gulf Coast at Smiths Bluff. The new 10-inch line which went into operation July 11 is now transporting between 25,000 and 30,000 bbls. daily to this point, where some of it is shipped by tankers to the company's refinery at Marcus Hook, on the Atlantic Seaboard.

Building Booster Stations

Three main pumping stations equipped with General Electric motors, driving centrifugal pumps, are now forcing the oil through this carrier, and three more booster stations are being completed to use when more oil is desired to be rushed through the line, which will then have a capacity of better than 40,000 bbls. daily. The stations are examples of what future pipe line stations will be, having been changed from the regular form as seen along most lines, and resembling model homes in a new addition of some city. The stations themselves are of light colored brick, with tiled roofs, and the homes of the men are neat little bungalows of English design, with sodded lawns, transplanted trees, and up-to-date light standards along the concrete walks which run in front of the homes.

Another factor of efficiency in development of the field is the system of roads which has been built throughout. They are 50 feet wide, instead of the mere trails which have been in existence; are graded and well drained, with substantial culverts or bridges erected where necessary to withstand heavily loaded trucks, and although the sand continues to slow up traffic, it is not the impediment that it was before these roads were constructed.

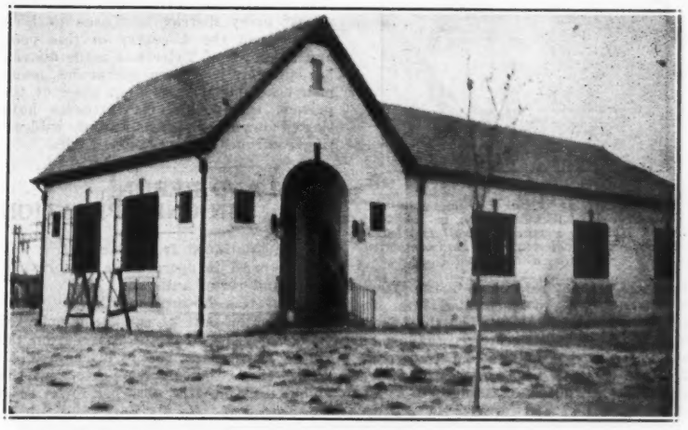


In the heart of Van. Shacks have given way for batteries of tanks. These are all 96-foot derricks.

As each well is completed and connected to the gathering line, everything is removed from around the base of the derrick and the well placed in as neat a condition as possible, helping to make the pool appear as a model one from the standpoint of production efficiency.

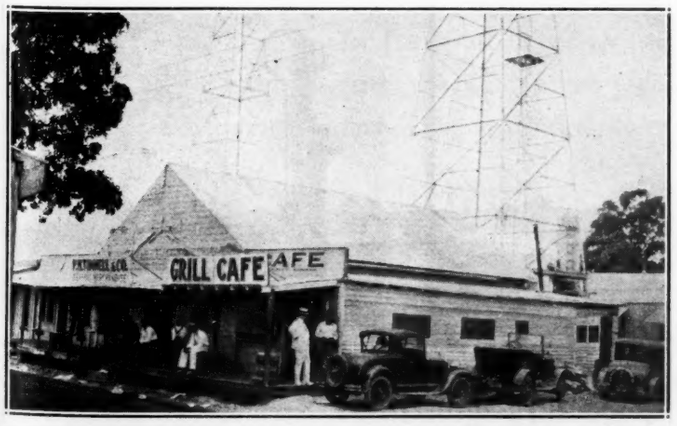
Excess Strips

Excess strips have caused much trouble to the companies operating under the unit plan, and several strips have been purchased at unheard of prices due to the fact that to have allowed the lease holders to go ahead and drill these strips would have resulted in a demoralization of the unit plan. But so far the companies have been able to restrain drilling within the unit plan in an orderly manner, and companies holding possible producing acreage to the northeast have met to take action to hold down drilling activities on that land also. There is a possible chance that a second unit plan might be adopted, but as yet it has not taken shape. The Pure Oil Co., Humble Oil & Refining Co., and The Texas Company are the companies holding this acreage, with three independent concerns holding three small leases within the area.

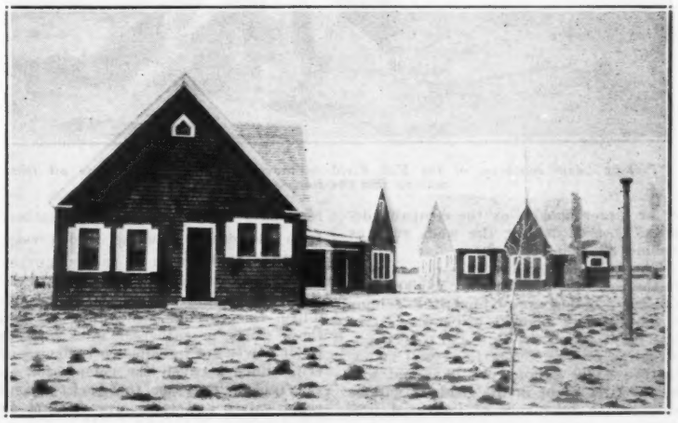


Pumping station at Pure Oil Co.'s tank farm in the Van Field. This station marks an entirely new mode in pump station architecture, being constructed of light colored brick with a tile roof.

Drilling in the field is all done with rotary tools, the wells being put down within about 20 to 30 days, although the discovery well took about 45 days to complete, due to the fact that it was a wildcat and more careful drilling had to be done in feeling its way down through the unknown formations. This well topped



View showing P. H. Tunnell & Co.'s general store which was moved forward to make way for a derrick in the backyard. This was the first store in Van, built in 1890, but enlarged to accommodate trade in 1930.



View of the three houses erected near the Pure Oil Co.'s pumping station just west of the Van Field. These are for the pumpers and their families, and presage something new for pumping stations. Such houses have been constructed at all other pumping stations along the Pure-Van Pipe Line Co.'s 10-inch line from Van to Smiths Bluff.

the Woodbine sand from 2,556-2,662 feet, from which formation all wells in the field are producing, and was first completed at 2,710 feet, producing 35.0 gravity, sweet oil. Many other wells in the field have cored many more feet of saturated sand than this well has cored, in some cases finding as many as 500 feet of the pay strata, making the field look as if it would be of long life.

Drilling and Casing Practice

About 300 feet of 10-inch surface casing is set in every well, and a string of

Picture showing "hook-up" on Sun Oil Co.'s No. 1 I. W. Thompson in the Van Field. Note the neatness of well and lease. This is identical of all other completed wells in this pool.

7-inchO.D. casing set on top of the Woodbine sand, with a perforated liner instead of a screen. As soon as the Woodbine is contacted a core is taken. All wells are "washed in," and flowed through 2½-inch tubing, ½-inch choke being used in most cases, but later changed to smaller or larger chokes, as the company desires. Cost of drilling the wells runs at around $22,000 per well.

The largest volume of gas in any well in the field has been around 500,000 feet, the gas yielding approximately 3 gallons of gasoline per 1,000 feet. The new gasoline plant which the Pure Oil Co. is constructing on the Peters lease will manufacture 4,000 gallons per day, and will be the first plant in the field. It will be enlarged to take care of increased production, as is necessary.

The Carroll district, which name has been applied to the area outside of the No. 1 unit plan, lying northeast of the main field, is comprised of approximately 1,200 acres, which appears as potential producing acreage, and the operators holding this land have asked the Railroad Commission for a daily average allowance of 2,500 bbls. under the statewide prorartion which is apparently ready to be put into effect in Texas. The mian field, in No. 1 unit plan, is producing 25,000 bbls. per day, and the joint proration committee has recommended that the field be held to this amount, which has the approval of the producers in this area.

The Pure Oil Co., including the pipe line department of the company, has approximately 500 men in the field, practically all of them living at the camp.

Stimulated Wildcat Activity

The discovery of this field brought East Central Texas back upon the stage of leasing and drilling activities, and many wildcats have been drilled all over the district in hopes of picking up the Woodbine production as in the Van Pool, but so far none has "clicked," although several have had some interesting showings, others have correlated favorably on structure, and many have stimulated large lease and royalty "plays." The district is rather quiet at the present time, but let one distant wildcat obtain an exceptionally good showing of oil, or make a well, and the companies will again transfer many men, and rush in to purchase more blocks and checkerboard acreage just as they did for several months after the Jarman discovery well opened up the Van Pool.

Geologists, land men, geophysical parties, and scouts were transferred from almost every district in Texas to East Texas upon the discovery of this pool, and the town of Tyler was made district headquarters by several companies, many men headquartering at that place at the present time. Although activities have slowed down to a great extent, wildcatting continues all over the district.

SKIM AND RERUN IN ONE OPERATION

(Continued from Page 40)

shift is used to operate the combination crude and rerun unit.

Gas Absorption Plant

The major part of the gas supply for the gas absorption plant comes from the Dubbs unit. This gas is discharged directly from the gas separator at the Dubbs unit into the absorber tower. The remainder of the gas supply is gathered from the crude, gasoline, and pressure distillate tanks with a gas compressor. The crude, gasoline and pressure distillate tanks are connected into a main 6-inch line through which the gas from these tanks is gathered. Back pressure relief valves are installed in the gas gathering lines between the compressor and the tanks. Between the back pressure relief valves and tanks are vacuum and relief valves. A vacuum of 15-inch water is held on the gas gathering line between the gas compressor and the valves. The gas from the compressor is discharged through coolers into the absorber tower near the bottom.

Absorber Tower

The absorber tower is 2'6"x36' with bubble trays. Absorber oil is pumped from the lean oil tank through coolers and then over the top of the absorber tower and filters down through the bubble trays. A constant level is maintained in base of tower by an automatic liquid level control valve. The rich oil, which has absorbed the gasoline from the gas, flows into the rich oil vent tank.

Steam Still

The steam still is 3'6"x34' with bubble trays. The rich oil is pumped from the rich oil vent tank through heat exchangers countercurrent to the hot oil from the still and thence through a steam heat exchanger and discharges into the still about the middle.

A 1-inch open steam coil supplies live steam into the still for distillation and stripping. A 2-inch closed steam coil in the lower part of the still supplies heat to the oil in the still and aids in the distillation. The lean absorber oil from which the gasoline has been removed falls to the base of tower. An automatic liquid level control valve maintains a constant level in the bottom of the still. The oil flows through heat exchangers, as previously explained, countercurrent to the rich oil and then into the lean oil tank.

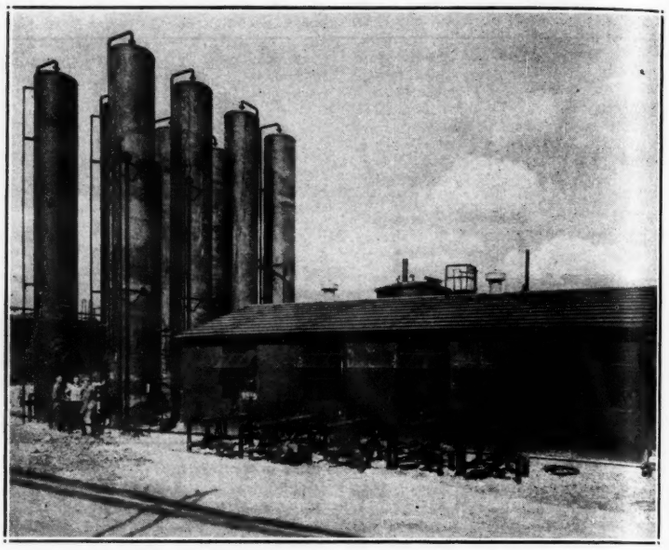
A constant temperature is maintained on top of the still by a gasoline reflux pump which is actuated by an automatic tower temperature control instrument. The gasoline vapors are condensed by passing through coolers and then flows into a gas separator drum, where the gas is released into the gas burner line. The gasoline flows from the gas separator tank into the gasoline rundown tanks.

Gas from the burner line is used as the actuating medium for the control valves. One man per shift is used to operate this unit. The operator of this unit spends part of his time loading tank cars and making plant transfers.

Treating Plant

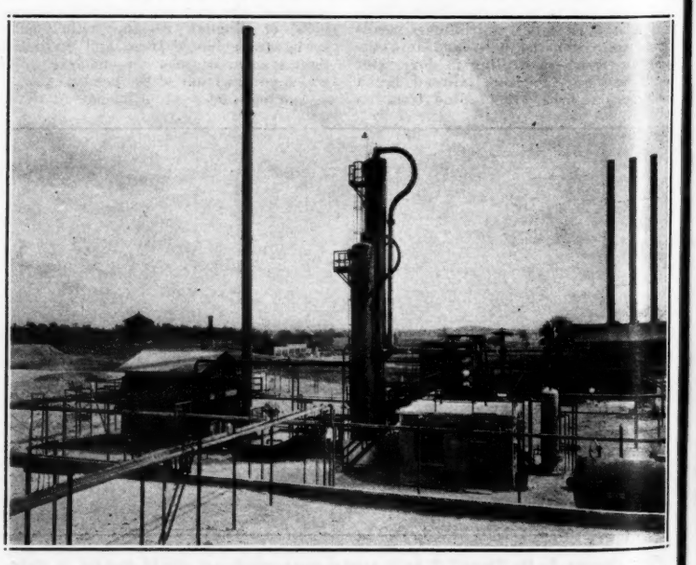
The treating plant consists of three systems: straightrun gasoline sweetening plant, cracked gasoline sweetening plant and the pressure distillate acid treating plant. The gasolines are sweetened with sodium plumbite, using baffle columns and orifice mixers for the contacting and vertical towers for settling and washers. The capacities of the systems are large enough to permit the treating of total production in eight hours.

The acid treating plant consists of baffle columns for contacting and four towers. The pressure distillate is treated first with sludge acid, which is introduced into the pressure distillate through an eductor from the second acid settler. Fresh 60° sulphuric acid is applied as a second dose by means of a proportioning valve. Acid blow cases are used to push



Treating plant at Allegheny-Arrow refinery. Unit provides separate equipment for sweetening straightrun gasoline and cracked gasoline, and acid treating pressure distillate.

"Pick-up" dam southeast of the Van Field to prevent salt water or waste oil from running into the Neches River.



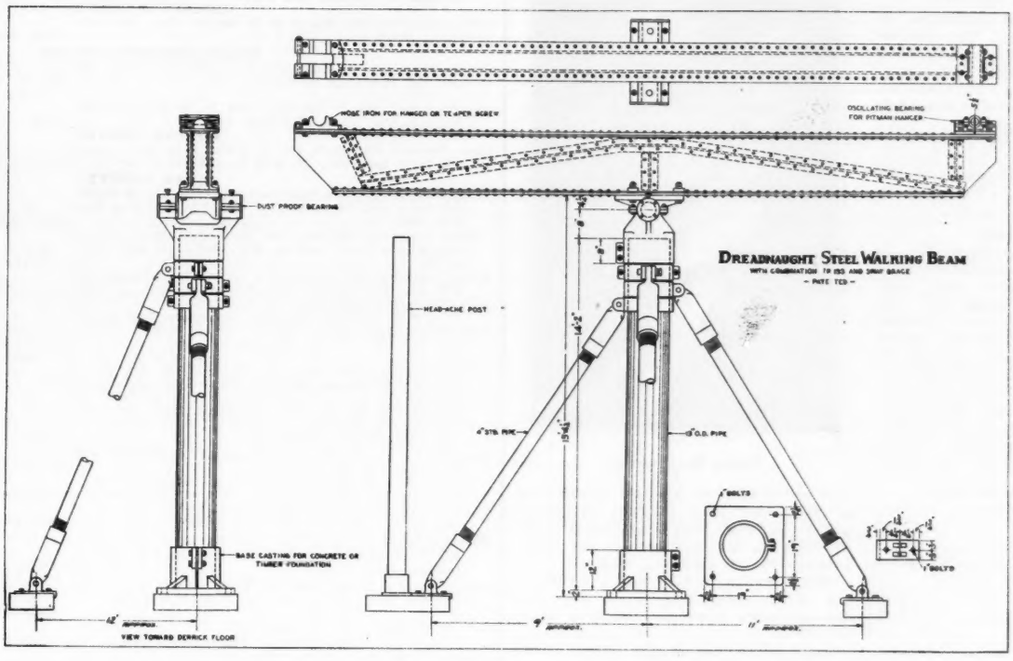
Combination skimming and pressure distillate rerun unit at Canton, Ohio, refinery of the Allegheny-Arrow Oil Co.

Detail Drawing

of interest

to users of Walking Beams

for Drilling or Pumping


DREADNAUGHT STEEL WALKING BEAM
DUST PROOF BEARING
HEAD-ACHE POST
BASE CASTING FOR CONCRETE OR TIMBER FOUNDATION
VIEW TOWARD DERRICK FLOOR

The DREADNAUGHT Patented Steel Beam was designed to carry modern deep operating loads found in many fields. It is a Beam of super-strength with a safety factor appreciated by users. The Internal Truss Brace construction eliminates side sway—leaves top and sides clear for movable counterweights—gives a beam with 100% recovery value and one that is practically indestructible.

Drawing also shows DREADNAUGHT Tubular Sampson Post and Adjustable Tubular Sampson Post Braces.

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the acid to the proportioning valve. Total pressure distillate production can be treated in eight hours.

The acid recovery plant is a small, compact unit consisting of a separator, fuel tank, weak acid receiver, weak acid storage, sour water tank and concentrator. This unit is adjacent to treating plant and is operated by the treater whenever there is a sufficient accumulation of sludge acid.

All tanks in the plant are equipped with steam snuffer lines having remote control valves. All tanks have welded roofs. Foamite fire protection is provided, consisting of generators, 40-gallon engines and 2½-gallon extinguishers.

Note.—A second article describing the Dubbs cracking unit will be published in next week's issue.

WEST TEXAS FIELDS

(Continued from Page 69)

top pay 435 feet, initial production 40 bbls., total depth 439 feet. The California Oil Co.'s No. 7 Smith, top pay 1,545 feet, initial production 340 bbls., total depth 1,690 feet. Hussman Oil Co.'s No. 1 Estes, dry and abandoned, total depth 1,680 feet.

Upton County

Eppenauer Drilling Co.'s No. 3 Chaney, top pay 2,465 feet, initial production 558 bbls., 30 per cent water, total depth 2,475 feet.

Winkler County

Lion Oil & Refining Co.'s No. 11 Grisham and Hunter (recompleted), total depth 2,810 feet, deepened from 2,734 feet, initial production 1,200 bbls. oil, making 94 per cent water, initial production 1,060 bbls. oil and 2,488 bbls. water before deepening. Republic Production Co.'s No. 11 Grisham and Hunter (recompleted), total depth 2,959 feet, deepened from 2,737 feet, top second pay 2,845 feet, initial production 2,690 bbls. fluid, 80 per cent water, before deepening well was making 100 per cent water.

Runs Through Trunk Lines

Company, size and location—	Bbls.
Atlantic, 10-inch, Houston	29,507
Gulf, 10-inch, Ranger	40,837
Humble, 2-8-inch, San Angelo	26,596
Humble, 10 and 12-inch, Station "A"	48,257
Illinois 2-8-inch, Del Rio	25,182
Magnolia, 8-inch, De Leon	27,180
Pasotex, 8-inch, El Paso	12,508
Shell, 10-inch, Healdton	38,521
Shell, 10-inch, Houston	22,935
Texas, 12-inch, Houston	21,500
Total	293,023

Runs to West Texas Refineries

Amarillo Ref. Co., Pyote	None
Big Spring Ref. Co., Big Spring	1,296
Burford Ref. Co., Pecos	4,701
Bluebonnet Ref. Co., Wickett	None
Cosden Ref. Co., Big Spring	9,452
Col-Tex Ref. Co., Colorado	6,500
Great Western Ref. Co., Big Spring	2,683
Humble O. & R. Co., McCamey	None
Mid-Tex Ref. Co., Midland	None
Richardson Ref. Co., Big Spring	5,682
Tonkawa Ref. Co., Pyote	1,421
Wickett Ref. Co., Wickett	150
Total	31,885

Tank Car Shipments

Fox & Thorsen from Mertzon	165
Orient from Hurdle	85
Southern C. O. P. Co. from Wickett	23,426
American from Pyote	10,214
Total	33,890
Total daily average distribution	358,798
Total daily average production (including Lea County, N. Mex.)	340,124
Daily average from storage	18,674

RANGER DISTRICT

Week Ending August 9

Brown County

S. B. Owens and others' No. 1 Reeves, dry and abandoned, total depth 1,302 feet.

Comanche County

Brown and others' No. 2 Scott-Utterbeck, dry and abandoned, total depth 3,607 feet.

Eastland County

Cranfill & Reynolds' No. 1 Powell, gas sand 860-70 feet, initial production 3,940,000 feet of gas, total depth 870 feet. Lone Star Gas Co.'s No. 3 Allen, dry and abandoned, total depth 3,610 feet. Hoffman & Page Co.'s No. 4 Coon, sand 1,245-60 feet, shot 40 quarts 1,242-62 feet, initial production 15 bbls., total depth 1,268 feet.

Palo Pinto County

Wickens and others' No. 1 Cunningham, dry and abandoned, total depth 3,292 feet.

Shackelford County

King Royalty Co.'s No. 3 Brewster, top pay 2,101 feet, initial production 270 bbls. in 12 hours, total depth 2,106 feet. Simmons and others' No. 5 Harvey, dry and abandoned, total depth 1,909 feet. C. Suralley's No. 1 Alexander, dry and abandoned, total depth 1,363 feet.

JAMES H. SNOWDEN DIES SUDDENLY IN NEW YORK

NEW YORK, Aug. 11.—James Hastings Snowden, formerly of Oil City, Pa., and one of the leading figures in the petroleum industry, died suddenly in a hospital here last Wednesday. Mr. Snowden was associated with Henry McSweeney,

James H. Snowden

also of Oil City, in the firm of Snowden & McSweeney. The company maintains offices in New York and operates extensively in several lines. It has large holdings in the Texas oil fields.

Mr. Snowden was born in Oil City, a son of Mr. and Mrs. J. G. M. Snowden. He graduated from the Oil City High School in the class of 1888, and immediately entered the employ of the Lamberton National Bank.

While in the bank he became interested in the oil business and operated leases at Plumer and Trunkeyville. He left Oil City about 25 years ago and went to Indiana where with his brother, George, and E. W. Evans, he opened up several new oil territories.

The three prospered in Indiana and it was there that Mr. Snowden formed an alliance with Henry McSweeney. The firm of Snowden & McSweeney was formed and operated on a large scale through several western states. After continued success there, Mr. Snowden moved to New York where he established his home.

Mr. Snowden was well known as a philanthropist and he furnished the sun room for men in menory of his parents, in the new Oil City Hospital. He leaves his wife and three children. His brother, George, and one sister died several years ago.

SUGGESTS REGULATIONS TO SAFEGUARD TANKERS

By Charles E. Kern

Washington Bureau, The Oil and Gas Journal

WASHINGTON, D. C., Aug. 11.—As an outgrowth of the collision between the S.S. Fairfax and the M.S. Pinthis, Dickerson N. Hoover, supervising inspector general of the Steamboat Inspection Service of the Department of Commerce, submitted to Secretary Robert P. Lamont two suggestions with reference to avoiding, if possible, repetition of a similar disaster. The suggestions follow:

"1. I recommend that you call a conference of the ship owners for the purpose of working out a plan for establishing passing lanes in coastwise waters. The necessity for this has been established in Massachusetts Bay, but my thought is, while the conditions there may be met by establishing passing lanes, to also give attention to the same problem in other waters where it may be necessary.

"2. The law is strict with reference to the transportation of dangerous articles on steamers carrying passengers. Gasoline as cargo would not be permitted to be transported on a steamer carrying passengers, but here we have a disaster where a vessel that is forbidden by law to carry gasoline as cargo is the victim by fire, and lives are lost, as the result of a collision with a vessel which is permitted by law to carry gasoline as cargo. While there is no violation of any legal rule in the transportation of gasoline as cargo in a ship not carrying passengers navigation crowded waters in a fog, there is, I submit, a question as to the moral right to do this thing, and I recommend that you call a conference of the owners and operators of tankers with a view to working out a plan by which there may be an understanding that these vessels shall anchor in time of fog in waters where there will be no danger of collision with passenger ships."

WILDCAT OPERATIONS IN TEXAS PANHANDLE

(Continued from Page 70)

Texas Interstate P. L. Co.'s No. 1 Burnett, C SW, Sec. 6, Blk. 5, B.&B. Sur. ..... Drlg. 200 ft.

Texas Interstate P. L. Co.'s No. 2 Burnett, C NE, Sec. 77, Blk. 5, I.&G.N. Sur. ..... Setting 8-in. csg. 2,263 ft.

CHILDRESS COUNTY

C. L. Sloane et al's No. 1 B. P. Smith, Sec. 49, F. P. Knott lands ..... T.D. 5,000 ft.

COLLINGSWORTH COUNTY

Shoupe Bros.' No. 1 Aldus, 410 ft. N, 330 ft. E, Sec. 96, Blk. 16, H.&G.N.R.R. Sur. ..... Show oil and gas 1,678 ft; drlg. 3,070 ft.

Shoupe Bros.' No. 1 Whitson, 330 ft. N and E, SW, Sec. 33, Blk. 12, H.&G.N.R.R. Sur. ..... Rig.

DONLEY COUNTY

Blue Bonnett Oil Co.'s No. 1 Ball, 1,075 ft. N line, 985 ft. E line, Sec. 22, Blk. E, D.&P.R.R. Sur. ..... T.D. 3,006 ft; contract depth.

GRAY COUNTY

Amalgamated German-American Oil Co.'s No. 1 Webb, 330 ft. S and W, E½ NW, Sec. 12, Blk. A-9, H.& G.N. Sur. ..... S.D. 1,200 ft.

British-American Oil Co. and Shell Pet. Corp.'s No. 1 Smith, 330 ft. S and E, NW, Sec. 138, Blk. 3, I. &G.N. Sur. ..... Location.

Cockrell-McIlroy Oil Co.'s No. 1 Baer, 330 ft. S and W, NE, Sec. 126, Blk. 3, I.&G.N. Sur. ..... S.D. 2,596 ft.

Cockrell-McIlroy Oil Co.'s No. 1 Allam, 330 ft. N and E of E½ NE, Sec. 127, Blk. 3, I.&G.N. Sur. ..... S.D. 3,330 ft; to plug back.

Cockrell-McIlroy's No. 1 Horner, 330 ft. S and E, NE, Sec. 139, Blk. 3, I.&G.N. Sur. ..... S.D. 3,251 ft; 1,400 ft. oil in hole 3,210 ft.

Cockrell-McIlroy Oil Co.'s No. 1 Jackson, 330 ft. N and E of E 110 ac., SE, Sec. 138, Blk. 3, I.&G.N. Sur. S.D. 900 ft.

Continental Oil Co.'s No. 1 Combs & Worley, 330 ft. S and E, NE, Sec. 38, Blk. 3, I.&G.N. Sur. ..... Drlg. 1,590 ft.

Continental Oil Co.'s No. 1 Brown, 330 ft. S and W, Sec. 115, Blk. 3, I.&G.N. Sur. ..... Cellar.

Danciger O. & R. Co.'s No. 2 Bradford, C SW NE, Sec. 148, Blk. B-2, H.&G.N. Sur. ..... S.D. 2,311 ft.

Danciger O. & R. Co.'s No. 3 Arnold, 330 ft. N and E, SE, Sec. 149, Blk. 3, I.&G.N. Sur. ..... Location.

Danciger O. & R. Co.'s No. 1 McLaughlin, 330 ft. S, and E, NW, Sec. 33, Blk. B-2, H.&G.N. Sur. ..... Location.

Danciger O. & R. Co.'s No. 1 Catlin et al, 175 ft. S, 300 ft. E of N 71 ac. of E 231 ac., Sec. 57, Blk. 3, I.&G.N. Sur. ..... Drlg. 2,988 ft.

Danciger O. & R. Co.'s No. 5 Morse, 330 ft. N and E, SW SW NW, Sec. 1, Blk. 26, H.&G.N.R.R. Sur. ..... S.D. 2,575 ft; swbng. 30 bbls. oil per day 2,545-60 ft.

Dye & Gillette's No. 1 McConnell, 330 ft. N and W, W½ SE, Sec. 187, Blk. 3, I.&G.N. Sur. ..... Drlg. 605 ft.

Empire G. & F. Co.'s No. 1 Crow, 875 ft. N and W, NE, Sec. 137, Blk. 3, I.&G.N. Sur. ..... S.D. 2,590 ft.

Empire G. & F. Co.'s No. 1 Sailor, 330 ft. S and W, NE, Sec. 138, Blk. 3, I.&G.N. Sur. ..... Drlg. 3,110 ft.

Dick Graham's No. 1 Sullivan, 792 ft. N and W, Sec. 136, Blk. 3, I.&G.N. Sur. ..... S.D. 1,000 ft.

Jewell Oil Co.'s No. 1 Harrah, 330 ft. N and W, of W 40 ac., S 120 ac., E 240 ac., Sec. 163, Blk. 3, I.& G.N. Sur. ..... S.O. 3,185 ft; T.D. 3,325 ft; P.B. 3,295 ft; shot 140 qts. from 3,261-95 ft; 1,000 ft. oil in hole. T.P. 3,260-70 ft.

Jean Pet. Co.'s No. 1 Furneaux Bros., 330 ft. N and W cor. SE, Sec. 200, Blk. B-2, H.&T.N. Sur. ..... S.D. 2,283 ft.

Magnolia Pet. Co.'s No. 1 Cubine, 330 ft. N and W, NE, Sec. 36, Blk. 25, H.&G.N.R.R. Sur. ..... 9,000,000 ft. gas 2,325-35 ft; S.D 2,775 ft.

Magnolia Pet. Co.'s No. 1 Sailor, 990 ft. S, 330 ft. W, E½ NE, Sec. 138, Blk. 3, I.&G.N. Sur. ..... S.D. 2,622 ft.

Magnolia Pet. Co.'s No. 2 Sailor, 330 ft. S and W, E½ NE, Sec. 138, Blk. 3, I.&G.N. Sur. ..... Cellar.

Midwest Expltn. Co.'s No. 1 Cobb, 1,320 ft. W, 400 ft. S, NW, Sec. 165, Blk. 3, I.&G.N. Sur. ..... Drlg. 250 ft.

Midwest Expltn. Co. et al's No. 1 Waggoner, 1,320 ft. W, 330 ft. N, Sec. 173, Blk. 3, I.&G.N. Sur. ..... S.D. 2,582 ft.

Nelson et al's No. 1 Crews, 330 ft. S and E, NW, Sec. 12, Blk. 25, H.&G.N. Sur. ..... Drlg. 2,498 ft; 3,500,000 ft. gas 2,295 ft.

Prairie O. & G. Co.'s No. 1 Carey, 372 ft. W, 330 ft. N, Sec. 114, Blk. 3, I.&G.N. Sur. ..... S.D. 3,317 ft; 400 ft. oil in hole 3,235-45 ft; to shoot.

Saulsbury et al's No. 1 Sheridan, 330 ft. S and E, W½ NE, Sec. 184, Blk. B-2, H.&G.N. Sur. ..... S.G. 2,805-15 ft; S.O. 2,835-45 ft. S.D. 3,095 ft; 600 ft. oil in hole 3,035-37 ft; to plug back.

W. A. Scott's No. 1 Cobb, 330 ft. S, 425 ft. W, N½ SE, Sec. 184, Blk. 3, I.&G.N. Sur. ..... S.D. 2,270 ft.

Shamrock O. & G. Co.'s No. 1 Reynolds, 330 ft. N and E, SE SE, Sec. 84, Blk. 3, I.&G.N. Sur. ..... Location.

Smith's No. 1 Morse, 200 ft. S, 330 ft. W, Sec. 6, Blk. 26, H.&G.N. Sur. ..... Drlg. 2,395 ft; 3,000,000 ft. gas 2,150-70 ft.

Smith & McDaniels' No. 1 Chapman, 990 ft. N and E, SW, Sec. 52, Blk. 25, H.&G.N. Sur. ..... S.D. 2,171 ft.

Sullivan et al's No. 1 Morse, 150 ft. W, 330 ft. S, N½ SW, Sec. 16, Blk. A-9, H.&G.N. Sur. ..... Rig.

Southern Expltn. Co.'s No. 2 Vaughn, 330 ft. S and E, SW, Sec. 138, Blk. 3, I.&G.N. Sur. ..... Location.

The Texas Co.'s No. 2 Brown, 170 ft. N, 330 ft. E, NW, Sec. 137, Blk. 3, I.&G.N. Sur. ..... Drlg. 842 ft.

Tedesco Oil Co. et al's No. 1 Morse, 330 ft. N and W, NE SW, Sec. 1, Blk. 26, H.&G.N. Sur. ..... S.D. 1,925 ft.

HUTCHINSON COUNTY

Dixon Creek Oil Co.'s No. 1 Johnson Bros., 330 ft. N and W, of E 60 ac. of NW 100 ac., Sec. 1, Blk. X03, H.&O.B. Sur. ..... Location.

Great Plains O. & G. Co.'s No. 1 Sanford, C of S 160 ac. of N 320 ac., Sec. 37, Blk. 46, H.&T.C. Sur. ..... Fishing 480 ft.
Holmes et al's No. 3 Quinn, 330 ft. S and W, Sec. 7, Blk. 9, L&G.N. Sur. ..... Drlg. 1,110 ft.
Huber & Co.'s No. 1 Christian, 330 ft. E, 990 ft. N, SW Sec. 33, Blk. Y, A.&B. Sur. ..... Drlg. 2,685 ft.
Phillips Pet. Co.'s No. 1 Johnson-Trammell, 930 ft. N, 330 ft. W, SE cor. W½, Sec. 33, Blk. Y ..... T.D. 3,250 ft; to plug back.
Phillips Pet. Co.'s No. 1 Herring, 330 ft. N and E, W½, Sec. 7, Blk. X02, H.&O.B. Sur. ..... Drlg. 1,110 ft.
Phillips Pet. Co.'s No. 1 Pease, 330 ft. S and E, Sec. 9½, Z. E. Collier Sur. ..... Fishing 910 ft.
Sinclair O. & G. Co.'s No. 1 Johnson Bros., 330 ft. N and E, NW, Sec. 32, Blk. Y, A.&B. Sur. ..... S.G. 2,230-54 ft; S.D. 2,850 ft; 39,000,000 ft. gas 2,340 ft.
Skelly Oil Co.'s No. 1 Johnson Bros., 660 ft. S and W SE, Sec. 30, Blk. Y, A.&B. Sur. ..... S.O. 3,065 ft. and 3,108-10 ft; S.D. 3,110 ft.
Spurlock et al's No. 1-A Christian, 440 ft. S, 330 ft. W, NE cor. SE SE, Sec. 33, Blk. Y ..... 60,000,000 ft. gas; drlg. 3,145 ft.
Stansylvania Oil Co.'s No. 1 Whittenburg, 330 ft. S and W, Sec. 129, Blk. Z, E.L.&R.R. Sur. ..... Spudded and S.D.

LIPSCOMB COUNTY

Brown et al's No. 1 Box T Ranch, SW NE, Sec. 612, H.&T.C. Sur. ..... S.G. 3,760 ft; S.D. 4,142 ft.
Okla. Public Service Co.'s No. 1 C. W. Jones, NE SW, Sec. 100, H.&T.C. Sur. ..... S.D. 4,954 ft; shot with 30 qts. to loosen bit.

LUBBOCK COUNTY

Center Oil Co.'s No. 1 Bowles Ranch ..... Small S.O. 1,133-40 ft; S.D. 4,167 ft.

MOORE COUNTY

Delmar Oil Co.'s No. 1 Jones, 990 ft. E, 330 ft. N, NW, Sec. 171, Blk. 3-T, T.&N.O. Sur. ..... Drlg. 2,910 ft.
Gulf Prod. Co.'s No. 1 Kilgore, C SW, Sec. 22, Blk. P.Mc., E.L.R.R. Sur. ..... Gas estimated 15,000,000 ft. 3,050-60 ft; T.D. 3,645 ft; to complete as gasser.
Shamrock O. & G. Co.'s No. 1 Shory, 330 ft. N and W, NE, Sec. 187, Blk. 3-T, T.&N.O Sur. ..... 35,000,000 ft. gas 2,830-3,050 ft; S.O. 3,472 ft; spraying 50 bbls. per day from 3,498-3,503 ft; T. D. 3,533 ft; P.B. 3,519 ft; shot with 50 qts. from 3,495-3,519 ft; C.O.
Texas Interstate P. L. Co.'s No. 1 Zotness, C NW, Sec. 55, Blk. 6-T, T.&N.O. Sur. ..... Drlg. 2,465 ft.
Texas P. L. Co.'s No. 1 Sneed, Jr., C NE, Sec. 46, Blk. 6-T, T.&N.O. Sur. ..... Drlg. 2,300 ft.
Texas Interstate P. L. Co.'s No. 1 Sneed, Jr., C NE, Sec. 48, Blk. 6-T, T.&N.O. Sur. ..... Location.

MOTLEY COUNTY

Matador Oil Corp.'s No. 1 Owens, C NE, Sec. 10, Blk. G, B.&B. Sur. ..... S.D. 580 ft.

POTTER COUNTY

Marshall Spivey's No. 1 Bivins, C SW, Sec. 39, Blk. M-20, G.&M. Sur. ..... Set 8-in. csg. 1,900 ft.
Canadian River Gas Co.'s No. 1 McBride estate "A," 4,950 ft. S, 330 ft. W, E½ S½, Sec. 98, Blk. 46, H.&T.C. Sur. ..... Rigging up.
Texas Interstate P. L. Co.'s No. 1 Masterson, C S 160 ac., Sec. 35, Blk. 3, G.&M. Sur. ..... Drlg. 830 ft.

RANDALL COUNTY

W. A. Patterson's No. 1 Palo Duro, Sec. 60, Blk. K-14 ..... S.D. 1,250 ft.

ROBERTS COUNTY

Big Bend Oil Co.'s No. 1 Ledrick, Sec. 7, Blk. A-5 ..... Shot 10 qts. 5,270-93 ft; S.O. 5,-288 ft; S.D. 5,992 ft.

WHEELER COUNTY

Johnson et al's No. 2 Hicks, 890 ft. W, 990 ft. S, Sec. 49, Blk. 17, H.&G.N. Sur. ..... S.D. 1,820 ft.
Lone Star Gas Co.'s No. 1 Ritchey, C NE NE, Sec. 3, Blk. 24, H.&G.N. Sur. ..... Drlg. 1,678 ft.
Long et al's No. 1 Willington, 330 ft. S and W, NW, Sec. 8, Blk. 27, H.&G.N. Sur. ..... Drlg. 2,010 ft; 15,000,000 ft. gas 1,910-35 ft. and 1,970-85 ft.
Magnolia Pet. Co.'s No. 2 Worley, 330 ft. N and W, NE, Sec. 39, Blk. 24, H.&G.N. Sur. ..... Rig.
McGee et al's No. 1 Jolly, C NE, Sec. 15, Blk. A-8, H. &G.N. Sur. ..... Drlg. 1,770 ft.
Murchison & Fain's No. 1 Grogan, C SE NW, Sec. 74, Blk. 23, H.&G.N. Sur. ..... S.D. 1,500 ft.
Murchison & Fain's No. 2 Grogan, C SW SE, Sec. 73, Blk. 23, H.&G.N. Sur. ..... Location.
Murchison & Fain's No. 1 Hanes, C NW NW, Sec. 31, Blk. 17, H.&G.N. Sur. ..... Rig.
Murchison & Fain's No. 2 Purcell, C SW NW, Sec. 50, Blk. 17, H.&G.N. Sur. ..... Drlg. 2,333 ft.
Upham Gas Co.'s No. 1 Williams & Laycock, C NW NW, Sec. 5, Blk. 27, H.&G.N. Sur. ..... Drlg. 1,015 ft.
Wischkamper et al's No. 1 Kiser, 330 ft. N and E of SW, Sec. 33, Blk. 17, H.&G.N. Sur. ..... S.D. 1,510 ft.
Woodley et al's No. 1 Sloss & Admire, 660 ft. N, 330 ft. E, Sec. 47, Blk. 13, H.&G.N. Sur. ..... Drlg. 1,050 ft.

WILDCAT OPERATIONS IN WEST TEXAS

(Continued from Page 69)

CRANE COUNTY

Cranfill Bros. and Gulf's No. 1 J. B. Tubb, 2,310 ft. from N and 330 ft. from E of Sec. 8, Blk. B-27, Public School Land ..... Fishing 3,993 ft.
C. C. Duffey's No. 1-C Cowden Bros. & Co., 2,640 ft. from S and 3,960 ft. from W of Juan Cordona Sur. ..... Shut down 631 ft.
Sun Oil Co.'s No. 1 First National Bank, C Sec. 6, J. H. Gibson Sur. ..... Drlg. 3,125 ft.

CROCKETT COUNTY

Dixie Oil Co. and Amerada's No. 2 Powell, 258 ft. N and 2,349 ft. W of NE cor. of Sec. 42, T.C. Ry., but located in Sec. 52, Blk. BB ..... Location.
Doleman & Moore's No. 1 Perner, 3,135 ft. from N and 1,485 ft. from E of Sec. 36, Blk. 2, L&G.N. Sur. ..... Spudded and shut down.
Magnolia Pet. Co.'s No. 1 Hoover, 2,310 ft. from N and 330 ft. from E of Sec. 12, Blk. 1, G.C.&S.F.R.R. Sur. ..... Drlg. 5,795 ft.
Magnolia Pet. Co.'s No. 2 Hoover, 2,310 ft. from S and 335 ft. from E of Sec. 2, Blk. FF, B.&B. Sur. ..... Shut down 280 ft.
G. Schaul's No. 1 Bouscour Est., 330 ft. N and 2,310 ft. from W of Sec. 27, Blk. HH, G.C.&S.F. Sur. ..... Rig up and shut down.

CULBERSON COUNTY

Grisham & Hunter's No. 2 Garren, 2,475 ft. from S and 1,566 ft. from E, Sec. 20, Blk. 89, Public School Land ..... Shut down 1,520 ft.
Kornrumpf et al's No. 1 Garren, 330 ft. S and W, Sec. 15, Blk. 79, Public School Land ..... Shut down 850 ft.

ECTOR COUNTY

C. P. Davis et al's No. 1 Hendricks, C SW, Sec. 46, Blk. 42, Twp. 2s, T.&P.R.R. Sur. ..... Shut down 4,012 ft.
Humble Oil & Ref. Co.'s No. 1 Jones, 330 ft. from S and 423 ft. from W of Sec. 6, Blk. 44, T.&P. Sur. ..... Drlg. 2,495 ft.
Independent Oil & Gas Co.'s No. 1 Eidson, 1,250 ft. S and 2,144 ft. E of NW cor., Sec. 5, Blk. 44, Twp. 3s, T.&P. Sur. ..... Shut down 3,800 ft.; 1,000 ft. oil in hole.
H. F. Wurts' No. 1 E. A. Ibbetson et al, 330 ft. from N and E lines of NW, Sec. 16, Blk. 46, Twp. 3s, G.M.M.Br.&A. Sur. ..... Cleaning out to set 8-in. casing at 2,375 ft.
T. P. Coal & Oil Co.'s No. 1 McKenzie, 1,650 ft. from S and 330 ft. from E of Sec. 282, Blk. 45, Twp. 2s, T.&P. Sur. ..... Shut down 3,870 ft.; swabbing dry.
R. R. Penn et al's No. 1 Goodman et al, 2,640 ft. N and 330 ft. W of SE cor., Sec. 27, Blk. 44, T.&P.R.R. Sur. ..... Drlg. 4,340 ft.
Skelly Oil Co. and Republic Prod. Co.'s No. 1 McKenzie, 990 ft. from S line and 330 ft. from E line of Sec. 28, Blk. 45, Twp. 2s, T.&P. Sur. ..... Shut down 3,750 ft.; flowed 110 bbls. on July 12; shut in for storage.
Skelly Oil Co. et al's No. 1-C University, 2,310 ft. from N and W of Sec. 2, Blk. 35 ..... Drlg. 2,050 ft.
Sunray Oil Co. et al's No. 1 Jones, 2,330 ft. from N and 440 ft. from E of Sec. 6, Blk. 44, Twp. 3s, T.&P. Sur. ..... Plugged back to 3,812 ft.; well now dead; swabbed 5 bbls. per hour after shot on 2-hr. test.

EL PASO COUNTY

Lane-The Texas Company's No. 1 Malone, 2,110 ft. from SW and NW of Sec. 46, J. M. Day Sur. ..... Shut down 3,089 ft.

FISHER COUNTY

Cranfill & Reynolds' No. 2 Barrett, 330 ft. from N and W of NE, Sec. 199, B.B.B.&C. Sur. ..... Total depth 3,109 ft.; swabbed 318 bbls. oil in 12 hrs. from sand 3,100-09 ft.
Cranfill & Reynolds' No. 2 Flannigan, 330 ft. from S and E of W half of Sec. 200, B.B.B.&C.R.R. Sur. ..... Drlg. 2,960 ft.
Mid-West's No. 1 Decker, 330 ft. from S and W of W 80 ac. of N 160 ac., Sec. 8, Richardson Sur. ..... Drlg. 3,025 ft.
Roeser & Pendleton's No. 1 Steele, 660 ft. from N and 440 ft. from W of N half of SW, Sec. 210, B.B.B.&C. Sur. ..... Show gas 1,845-65 ft.; cleaning out 3,192 ft.; 1,500 ft. oil in hole.
The Texas Company's No. 1-A Teagarden, 150 ft. from S and 420 ft. from E of Sec. 8, Richardson Sur. ..... Drlg. 2,945 ft.

GAINES COUNTY

Humble Oil & Ref. Co.'s No. 1 Carswell, 660 ft. S and E of NW cor. of Sec. 23, Blk. A-27, Public School Land ..... Plugging 4,835 ft.

GARZA COUNTY

Pandem Oil Corp.'s No. 1 Justice, 330 ft. from S and W of Sec. 12, Blk. 4, H.&G.N. Sur. ..... Spudded and shut down.
Richard's No. 1 Stoker, 330 ft. from N and W, Sec. 2, Blk. 2, G.H.&H. Sur. ..... Cleaning out 3,044 ft.

GLASSCOCK COUNTY

Timberlake & Snyder's No. 1 Meek, 2,310 ft. W and 1,600 ft. N of SE cor., Sec. 7, Blk. 34, Twp. 3s, T.&P. Sur. ..... Total depth 2,956 ft.; fishing casing.
World Oil Co.'s No. 3-C McDowell, 2,310 ft. from S and W of NE cor., Sec. 21, Blk. 34, Twp. 2s, T.&P. Sur. ..... Shut down 680 ft.

HOWARD COUNTY

Cosden Oil Co.'s No. 6 Roberts-A, 200 ft. N and E of SW cor., Sec. 129, Blk. 29, W.&N.W.R.R. Sur. ..... Sulphur water 1,433-46 ft.; shut down 1,456 ft.
Greene O. & R. Co. et al's No. 1 L. C. Denman, 330 ft. from N and W of E half of NE Sec. 14, Blk. 30, Twp. 1s, T.&P. Sur. ..... Derrick.
Merriwether's No. 1 Smith, 150 ft. from S, 2,490 ft. from W, Sec. 45, Blk. 33 ..... Drlg. 3,050 ft.
Moody Oil Corp.'s No. 23-B Roberts, 990 ft. from N and W of Sec. 137, Blk. 29 ..... Shut down 261 ft.

HUDSPETH COUNTY

Western States Oil Co.'s No. 1 Gardner & Moseley, NE NW, Sec. 12, Blk. 18 ..... Fishing 3,155 ft.
Williams & Williams Drlg. Co.'s No. 1 Noelke, 200 ft. from N and 1,020 ft. from E of Sec. 3, City of San Antonio Sur. ..... Machine.

IRION COUNTY

Crawford Oil Co.'s No. 1 Williams, 450 ft. from N, 150 ft. from W, Subd. 8 ..... Shut down 1,105 ft.
Cromwell et al's No. 1 Tankersley, 150 ft. from N and 210 ft. from W of E half of Sec. 1,330, G.C.&S.F. Sur. ..... Shut down 1,025 ft.
Straughn & Texannati Oil Co.'s No. 3 Nutt, 804 ft. from N and 150 ft. from W of NE cor. of NW, Blk. 6, Gonzales Co. School Land ..... Drlg. 1,260 ft.
P. H. Williams' No. 1 Ash, C of Sec. 20, Washington County ..... Show oil 7,931 ft.; shut down 8,-890 ft.; may drill deeper.
Webb et al's No. 1 Nutt, 150 ft. from S and 116 ft. from W of Blk. 5, Gonzales Co. School Land ..... Location.

JONES COUNTY

Gibson & Johnson's No. 1 Hudspeth, 1,125 ft. from N and 483 ft. from E of Sec. 22, Edward Miles Sur. ..... 600 ft. oil and water in hole; top pay 2,542 ft.; drlg. 2,605 ft.
Pope et al's No. 1 Swann, 2,023 ft. from S and 400 ft. from E of I. Miley Sur. No. 281 ..... Spudding.

KENT COUNTY

White & Smith's No. 1 Pursley estate, 1,320 ft. from E and 2,640 ft. from S of Sec. 3, Blk. H, H.&T.B. Sur. ..... Shut down 273 ft.

LAMB COUNTY

Graham Oil & Gas Co.'s No. 1 Ellwood, CWL, Sec. 9, Blk. T, T. A. Thompson Sur. ..... Shut down 4,428 ft.

LOVING COUNTY

Dixie and Phillips Pet.'s No. 1 Johnson, 1,320 ft. from N and E of Sec. 38, Blk. 54, Twp. 2s, T.&P. Sur. ..... Drlg. 4,300 ft.
Eppenauer et al's No. 1 Allen, 2,310 ft. from NE and NW lines, Sec. 90, Blk. 1, W.&N.W. Sur. ..... Spudded and shut down.
Lockhart & Co.'s No. 3 Bowen & Wells, 330 ft. from NE and SE of Sec. 92, Blk. 1, W.&N.W. Sur. ..... Shut down 3,383 ft.
Hadlock et al's No. 2 Russell, 1,650 ft. SW of NE line, 2,310 ft. NW of SE line, Sec. 80, Blk. 1, W.&N.W. R.R. Sur. ..... Total depth 4,280 ft.; plugged back to 4,273 ft.
Henshaw et al's No. 1 Reagan & McElvain, 990 ft. from SE and 330 ft. from SW, Sec. 84, Blk. 1, W.&N.W. Sur. ..... Drlg. 400 ft.
Lockhart & Co.'s No. 2 fee, 676 ft. S, 330 ft. W, Sec. 91, Blk. 1, W.&N.W. Sur. ..... Spudded 140 ft.; shut down.
Lockhart & Co.'s No. 3 Hubbard, 1,650 ft. from NE line, 330 ft. NW line of Sec. 83, Blk. 33, H.&T.C.R.R. Sur. ..... Rigged up and shut down.
Lockhart's No. 2 Wheat & Ramsey, 440 ft. from NE and 880 ft. from NW, Sec. 83, Blk. 1, W.&N.W. Sur. ..... Drlg. 3,300 ft.
Miller et al's No. 1 Chapman, 225 ft. from NW and 285 ft. from SW line, Sec. 71, Blk. 1, W.&N.W. Sur. ..... Drlg. 1,885 ft.
Rush et al's No. 1 Wheat, 1,650 ft. from NW and 330 ft. from SW of Sec. 85, Blk. 1, W.&N.W. Sur. ..... Drlg. 2,360 ft.
California Co.'s No. 2 Reagan & McElvain, 440 ft. from NW and SW, Sec. 84, Blk. 1, W.&N.W. Sur. ..... Drlg. 2,830 ft.
California Co.'s No. 4 Reagan & McElvain, 330 ft. from NE and 1,650 ft. from NW, Sec. 84, Blk. 1, W.&N.W. ..... Drlg. 675 ft.
Lee O. White et al's No. 1 Russell et al, 320 ft. from NW and 2,200 ft. from SW, Sec. 80, Blk. 1, W.&N.W. ..... Shut down 792 ft.

LYNN COUNTY

George McCamey's No. 1 Edwards, 165 ft. N and E, Sec. 5, Blk. 2, L.S.&W. Sur. ..... Shut down 5,280 ft.

MENARD COUNTY

Barnett et al's No. 3 Callan City Co., 300 ft. from S and W, Sec. 1, B.S.&F. Sur. ..... Show oil 709-11 ft.; drlg. 1,185 ft.
Panhandle Ref. Co.'s No. 2 Eckhart, 1,320 ft. from W and 1,320 ft. from S of Sec. 10, Blk. 2, T.W.N.G. Sur. ..... 500,000 ft. gas with show oil 2,945 ft.; drlg. 3,040 ft.
Priest's No. 1 Sorrell, 1,000 ft. from E and 200 ft. from S cor., Sec. 132, E.L.R.R. Sur. ..... Fishing tools 2,415 ft.

MITCHELL COUNTY

Morrison et al's No. 2 Morrison, 2,390 ft. from N and 660 ft. from E of Sec. 31, Blk. 28, Twp. 1n, T.&P. R.R. Sur. ..... Total depth 3,112 ft.; top pay 3,038 ft.; 1,000 ft. oil in hole; swabbing 40 bbls. in 24 hrs.

Morrison et al's No. 1 Poe et al, 660 ft. S and 1,980 ft. W parallel to section lines of NE cor., Sec. 8, Blk. 27, T.&P. Sur. ..... Spudded 10 ft. and shut down.

PECOS COUNTY

Barnes et al's No. 1 Sanford, 160 ft. from NW and 157 ft. from SW of Sec. 55, Blk. 10, H.&G.N. Sur. ..... Shut down 750 ft.
Curry & Eakin's No. 1 Pecos Valley Oil Co., 1,050 ft. from SE and 1,470 ft. from SW, Sec. 36, Blk. 3, H.&T.C. Sur. ..... Drlg. 780 ft.
Dittman's No. 1 Jackson, 2,310 ft. from NE and 330 ft. from NW Sec. 28, Blk. 3, H.&T.C. ..... Location.
Dittman's No. 1 Eaton, 2,310 ft. from SW and NW Sec. 35, Blk. 3, H.&T.C. ..... Location.
Dittman's No. 2 Eaton, 990 ft. from SW and 330 ft. from SE Sec. 35, Blk. 3, H.&T.C. ..... Location.
Dittman's No. 1 Eaton, 330 ft. from NE and SE Sec. 37, Blk. 3, H.&T.C. ..... Location.
G. A. Henshaw, Jr., Inc.'s No. 1 University, 1,650 ft. from S and 990 ft. from E, Sec. 32, Blk. 16 ..... Shut down 990 ft.
Humble Oil & Ref. Co.'s No. 1 Kokernot, 1,320 ft. from N line and 1,467 ft. from W line of Sec. 227, Blk. 10, G.H.&S.A. Sur. ..... Drlg. 2,657 ft.
Humble Oil & Ref. Co.'s No. 1-B Thoman, 1,608 ft. from N and 4,062 ft. from E of Sec. 98, Blk. OW, G.C.&S.F. Sur. ..... Drlg. 80 ft.
Independent O. & G. Co.'s No. 4 McDonald, 115 ft. from N and 2,485 ft. from E, Sec. 46, Blk. 12, H.&G.N. ... Shut down 1,705 ft. Show oil 1,660-67 ft.
Magnolia Pet. Co.'s No. 1 Byrne, 2,490 ft. from SE and SW, Sec. 54, Blk. 10, H.&G.N. Sur. ..... Shut down 203 ft.
McCurdy & Brown's No. 1 Tippett, 1,150 ft. from S and 150 ft. from W of SE, Sec. 40, Blk. 197, G.C. &S.F. Sur. ..... Shut down 417 ft.; show oil 414-17 ft.
McCurdy & Brown's No. 2 Tippett, 150 ft. from N and W of SE, Sec. 40, Blk. 194, G.C.&S.F. ..... Location.
Messenger et al's No. 2 Byrne, 2,490 ft. from NE and SE of Sec. 54, Blk. 10, H.&G.N. Sur. ..... Shut down 1,367 ft.; top pay 1,364 ft.; flowing 93 bbls. daily.
Messenger et al's No. 1 Butz, 1,830 ft. from NW and 1,170 ft. from SW, Sec. 54, Blk. 10, H.&G.N. Sur. .... Shut down 740 ft.
J. R. Miller et al's No. 1 Bennett, 359 ft. W from CWL, Sec. 1, Blk. 119, G.C.&S.F. ..... Shut down 1,700 ft.
J. D. O'Mara's No. 1 Bennett, Sec. 593, 1,460 ft. from S, 150 ft. from E, G.C.&S.F. ..... Total depth 1,230 ft.; top pay 1,089 ft.; plugged back to 1,185 ft.; will drill deeper.
J. D. O'Mara's No. 1 Streety, C of Sec. 1, W.P. Howard Sur. ..... Underreaming 2,200 ft.
Oregon Oil Corp.'s No. 2 Yates, 150 ft. from S and W of Sec. 58, Blk. 1, L.&G.N. Sur. ..... Drlg. 2,290 ft.
Peren Oil Co.'s No. 2 Eaton, C of E of W, Sec. 27, Blk. 3, H.&T.C. Sur. ..... Shut down 1,324 ft.
Perren's No. 1 Jackson, 200 ft. from NW and SW of Sec. 28, Blk. 3, H.&T.C. Sur. ..... Shut down 1,445 ft.
Plymouth Oil Co.'s No. 1 Perry, 330 ft. from N and W Sec. 13, Blk. 194, G.C.&S.F. ..... Drlg. 1,685 ft.
Plymouth Oil Co.'s No. 4 Perry, 300 ft. from N and 420 ft. from E, Sec. 14, Blk. 194, G.C.&S.F. Sur. ..... Cellar.
R. W. Porpus et al's No. 1 State Land, 330 ft. S and W lines of NE, Sec. 28, Blk. OW, T.C.R.R. Sur. ..... Spudded and shut down.
Pure Oil Co.'s No. 1 Harrison, 2,310 ft. from N and 330 ft. from W of Sec. 203, Blk. 3, T.&P. Sur. ..... Drlg. 1,163 ft.
Riser & White's No. 1 Riser, 2,297 ft. from S and 997 ft. from E of Sec. 24, Blk. 12, H.&G.N. Sur. ..... Shut down 90 ft.
Sides & Cloyd's No. 2 Blackstone & Slaughter, C NW of Sec. 34, Blk. A-2, T.&C.R.R. Sur. ..... Shut down 2,070 ft.
California Co.'s No. 1 Fromme, 330 ft. from NE and NW, Sec. 106, Blk. 10, H.&G.N. Sur. ..... Shut down 1,650 ft.
California Co. et al's No. 1 Thomas, 990 ft. from NW and SW, Sec. 31, Blk. 34, H.&T.C. Sur. ..... Location.
The Texas Company's No. 1 Wright, 660 ft. S and E of NW cor., Sec. 9, Blk. 131, T.&St.L. Sur. ..... Shut down 3,504 ft.
Warner's No. 1 Webb, 2,550 ft. from NW and 6,100 ft. from NE of Sec. 311, Abst. 756, C. McGinley Sur. ... Rig up.
Webb's No. 3 fee, 1,900 ft. from W and 223 ft. from S, Sec. 106, Blk. OW, G.C.&S.F. Sur. ..... Shut down 595 ft.

PRESIDIO COUNTY

L. C. Brite's No. 4 Brite, 271 ft. from N and 1,188 ft. from E lines of Sec. 245, Blk. 4 ..... Shut down 2,630 ft.

REAGAN COUNTY

Big Lake Oil Co.'s No. 1-C University, 2,598 ft. S and 250 ft. W of NE cor., Sec. 1, Blk. 2, University Land.. Flowed 1,017 bbls. 24 hrs. ending August 4; total depth 8,668 ft.
Big Lake Oil Co.'s No. 4-C University, 1,120 ft. from N and 1,096 ft. from E of Sec. 1, Blk. 2 ..... Top pay 8,220 ft.; total depth 8,220 ft.; flowed 67 bbls. 24 hrs.
Big Lake Oil Co.'s No. 5-C University, 625 ft. from S and 250 ft. from W of Sec. 25, Blk. 9 ..... Drlg. 2,445 ft. August 4.
Texon Oil & Land Co.'s No. 3-B University, 2,240 ft. from S, 920 ft. from W, Sec. 36, Blk. 9 ..... Total depth 8,633 ft.; top pay 8,517 ft.; flowed 1,355 bbls. 24 hrs. August 4.

REEVES COUNTY

H. T. Hansford's No. 1 Williams, 150 ft. from S and W, Sec. 17, Blk. 6, H.&G.N. Sur. ..... Shut down 380 ft.
Black & Fink's No. 1 Brooks, 1,980 ft. N and 660 ft. W, Sec. 16, Blk. 50 ..... Shut down 1,860 ft.; show oil 1,820 ft.; cleaning out after two shots; filled up 200 ft. with oil.
Salsbury & Gregory's No. 1 Young Bell, 1,170 ft. from N and 330 ft. from E of Sec. 7, Blk. 5, H.&G.N. ..... Shut down 260 ft.
Lee O. White et al's No. 1 Hershersor, 330 ft. from N and W lines of Sec. 5, Blk. 51, Twp. 10, T.&P. Sur... Drlg. 4,100 ft.
California Co.'s No. 1 Kloh & Rumsey, 1,650 ft. from S and E of Sec. 13, Blk. 54, Twp. 4, T.&P. Sur. ..... Shut down 3,604 ft.

RUNNELS COUNTY

Dutton et al's No. 1 Dean, 5,475 ft. from NE and 1,948 ft. from NW in J. Heil Sur. No. 419 ..... Show oil 2,303-95 ft.; gas pocket 2,303 ft.
Gibson & Johnson's No. 2 Serratt, 2,310 ft. from S and 1,650 ft. from E of Sec. 150, E.T.R.R. Sur. ..... Derrick.
George W. Boyce's No. 1 Lang, 2,310 ft. N, 6,900 ft. E, Sec. 262 ..... Show oil 2,028 ft.; shut down 2,643 ft.

SCHLEICHER COUNTY

Delmar Oil Co.'s No. 1 O'Harrow, C of NW, Sec. 56, Blk. 1, G.H.&S.A.R.R. Sur. ..... Shut down 4,060 ft.
Interstate's No. 1 Whitten, 1,320 ft. from N and W, Sec. 35, Blk. LL, T.C.R.R. Sur. ..... Plugged back to shoot; show gas and oil 6,305-37 ft.; total depth 6,880 ft.
Teas & Gant's No. 1 Allison, 1,320 ft. N and E of SW cor. of Sec. 37, Blk. K, G.H.&S.A.R.R. Sur. ..... Drlg. 2,890 ft.
Wesner et al's No. 1 Nicks, 2,310 ft. from N and 2,362 ft. from E of Sec. 77, Blk. LL, T.C.R.R. Sur. ..... Shut down 750 ft.
Westyde et al's No. 1 Meador, 1,320 ft. from S and E of Sec. 661, G.C.&S.F. Sur. ..... Location.
George Wilson's No. 1 Page, Sec. 40, Blk. L, 1,290 ft. from N, 1,470 ft. from W, G.H.&S.A.R.R. Sur. ..... Fishing 4,912 ft.

SCURRY COUNTY

Byrd & Harmon's No. 1 Murphy, Jr., 320 ft. from N and E of Sec. 114, Blk. 97, H.&T.C. Sur. ..... Drlg. 3,411 ft.; swabbed 106 bbls. in 3 hrs.
Camp Spring Oil & Ref. Co.'s No. 3 Guinn, 1,300 ft. from S, 300 ft. from E, Sec. 12, Blk. 3, H.&T.C.R.R. Sur. ..... Shut down 4,373 ft.
Camp Spring Oil Co.'s No. 1 Strayhorn, 330 ft. from S and 1,980 ft. from W of Sec. 154, Blk. 3, H.&G.N... Shut down 471 ft.
I. B. Mimms et al's No. 1 J. J. Koonsman, Sec. 216, Blk. 2, H.&T.C.R.R. Sur. ..... Spudded and shut down.
G. E. Dickman and R. B. Pender et al's No. 1 F. C. Davis, 1,000 ft. N and 1,770 ft. W of SE cor. of Sec. 275, Blk. 2, H.&T.C. Sur. ..... Drlg. 4,810 ft.
Transcontinental Oil Co.'s No. 1 Peckham, 330 ft. from S and W of R. N. Miller Sur. ..... Drlg. 3,330 ft.

STERLING COUNTY

Mann et al's No. 1 Reed, 330 ft. from N and 2,310 ft. from W, Sec. 16, Blk. 14, S.P.R.R. ..... Shut down 2,202 ft.

SUTTON COUNTY

Independent Oil & Gas Co.'s No. 1 Wilson, Sec. 30, Blk. A, 1,650 ft. from N, 2,310 ft. from W ..... Location.

TAYLOR COUNTY

Clark et al's No. 1 Kendall, 250 ft. from N and W of farm in Willis Avery Sur. ..... Drlg. 1,955 ft.
Eastland Oil Co.'s No. 1 Hunter, 1,574 ft. from E and 3,418 ft. from S of William R. Ellis Sur. ..... Drlg. 1,205 ft.
Gibson & Johnson's No. 1 Bingham, 330 ft. N and E of SW cor. their 270.8-acre tract, Sec. 31, Guadalupe County School Land ..... Drlg. 2,410 ft.
John B. Jameson's No. 1 Webb, 1,170 ft. S and W of NE cor., Sec. 46, Lunatic Asylum Land ..... Show oil 4,917 ft.; drlg. 6,040 ft.
Hucony Oil Co. et al's No. 1 Richie, C SE, Sec. 10, Blk. A, S.P.R.R. Sur. ..... Shut down 1,080 ft.
Sanger et al's No. 1 City of Abilene, 830 ft. from S and 1,400 ft. from E of Sec. 66, Blind Asylum Lands .... Rigging up.

TERRELL COUNTY

Big Bend Oil Co.'s No. 1 Bassett, C NW, Sec. 155, Blk. D, M.-K.-T.R.R. Sur. ..... Shut down 2,180 ft.
Keck Pecos Trust Co.'s No. 1 Hamilton, C, Sec. 6, Georgetown Ry. Sur. ..... Shut down 3,150 ft.
Miller Bros.' No. 1 Allison & Burke, C NW cor., Sec. 10, Blk. 176, T.&P. Sur. ..... Shut down 120 ft.
Mrs. J. B. McPhees' No. 1 Sam Belt, C, Sec. 17, Blk. D-7, E.L.R.R. Sur. ..... Shut down 880 ft.; moved off machine.
Transcontinental Oil Co.'s No. 1 Goode, 2,152 ft. from E and 330 ft. from S, Sec. 26, Blk. 161, G.C.&S.F.R.R. Sur. ..... Shut down 5,200 ft.
Woodley & Jones' No. 1 Pankenham, C SE NW, Sec. 43, Blk. B-2, C.C.S.D.&N.G.R.R. Sur. ..... Shut down 640 ft.

TERRY COUNTY

Atlantic et al's No. 1 Carlisle, 990 ft. from S and E of Sec. 58, Blk. E, E.L.&R.R. Sur. ..... Plugging 5,001 ft.

TOM GREEN COUNTY

Belding & Dutton's No. 1 Nosworthy, 2,640 ft. from S and 587 ft. from E of John McNeese Sur. ..... Spudded.
Cosden Oil Co.'s No. 1 William Anson, 2,310 ft. S, 330 ft. W of NE cor., Sec. 20, Blk. 24, H.T.C.R.R. Sur. ..... Location.
Ellis' No. 3 Lewis, 1,350 ft. S and 450 ft. E of SW cor. Jas. Webb Sur. 77, but in Albert Black Sur. 75 ..... Shut down 1,101 ft.
Fitzgerald & Taliaferro's No. 1 Bennett, C SW, Sec. 1,628, E. H. Dinger Sur. ..... Plugged back to 2,405 ft. to straighten hole; shut down 2,447 ft.
Mintex Oil Co.'s No. 1 Campbell Est., 446 ft. from S and 630 ft. from W of Sec. 180, Dist. No. 11, S.P.R.R. Sur. ..... Shut down 422 ft.
Phillips Pet. Corp.'s No. 1 Gulden, 1,250 ft. from N and 1,583 ft. W of Sec. 77, James Webb Sur. ..... Drlg. 3,275 ft.
E. W. Wiley et al's No. 1 Maier, 200 ft. from E, 110 ft. from N, Sec. 6, Blind Asylum Land ..... Show oil 418-20 ft.; total depth 632 ft.

UPTON COUNTY

Cordova Union Land Co.'s No. 1 fee, 330 ft. from S and E line of Sec. 1, Blk. 1, M.-K.-T.R.R. Sur. ..... Location.

VAL VERDE COUNTY

Atlantic Oil Prod. Co.'s No. 1 Reynolds & Miller, 330 ft. from NE and NW Sec. 15, Blk. 32, H.&T.C. ..... Drlg. 750 ft.
A. Bluhm's No. 1 Yoast, 1,760 ft. N, 600 ft. W of SE cor., Sec. 31, Blk. 3, L.&G.N. Sur. ..... Location.
Independent Operators' No. 1 Whitehead, SE SE, Sec. 30, Blk. 4, L.&G.N. Sur., elev. 1,175 ft. ..... Shut down 5,360 ft.
O. O. Owen's No. 1 Mills, Sec. 128, Blk. 1, L.&G.N. Sur., elev. 2,130 ft. ..... Drlg. 6,600 ft.
Phantom Oil Co.'s No. 1 Ingram, 175 ft. W of E line and 300 ft. N of S line, Sec. 33, Blk. D-8, E.L.&R.R. Sur... Show oil 1,525 ft.; fishing 3,035 ft.
Valvert Oil Corp.'s No. 1 Bassett, C NE, Sec. 47, Blk. Y.. Shut down 4,009 ft.

WARD COUNTY

Bradford et al's No. 1 Murry, 1,782 ft. from NW and 2,157 ft. from SW, Sec. 11, Blk. 5, H.&T.C. Sur. ..... Drlg. 750 ft.
Gulf Prod. Co.'s No. 5 Hutchings, 330 ft. from S and W Sec. 3, Blk. F, G.&M.M.B.&A. Sur. ..... Location.
Gulf Prod. Co.'s No. 3 Wristen Bros., 220 ft. NE of SW and 220 ft. SE of NW, Sec. 18, Blk. 5, H.&T.C. Sur. .. Show gas 1,960-70 ft.; filling up with sulphur water 2,520-27 ft.; salt water 2,545 ft.; plugged back to 2,477 ft.
Magnolia Pet. Co.'s No. 1 Sealy, 330 ft. from S and E of NE cor. Sec. 46, Blk. 2, G.&M.M.M.&A. Sur. ..... Drlg. 500 ft.
R. F. Owens' No. 1 Johnson, 100 ft. from NE and 1,100 ft. from SE of Sec. 8, Blk. 33, H.&T.C.R.R. Sur. ..... Shut down 600 ft.
Penn and Atlantic's No. 1-B Pecos Mercantile Co., 990 ft. from NW and 2,310 ft. from NE, Sec. 16, Blk. 34, H.&T.C. Sur. ..... Shut down 2,240 ft.
Richardson et al's No. 4 O'Brien et al, 330 ft. from N and 2,340 ft. from W, Sec. 5, Blk. F, G.M.M.B.&A.... Drlg. 200 ft.
Tex-Oil Prod. Co.'s No. 1 Redman, 1,980 ft. NE of SW line and 1,980 ft. SE of NW line, Sec. 152, Blk. 34, H.&T.C.R.R. Sur. ..... Shut down 5,077 ft.; show oil 5,070 ft.; shot 140 qts. from 5,047-77 ft.; no results.
Shipley et al's No. 5 Hayzlett, assume common line Secs. 16 and 17 is N and S, 220 ft. S and 1,910 ft. W, Sec. 17, Blk. 5 ..... Standard rig.
Shipley et al's No. 1 Monroe, 330 ft. SE SW Sec. 3, Blk. 1 ..... Shut down 1,890 ft.
J. E. Smith's No. 1 Clement, 152 ft. SW of NE line and 153 ft. SE of NW line, Lot 7, Sec. 7, Blk. 32, H.&T.C.R.R. Sur. ..... Shut down 2,230 ft.; estimated 1,000,000 ft. gas; flowed 8 bbls. oil and 30 bbls. water per day
T. P. Coal & Oil Co.'s No. 1 Barker, 330 ft. from SW and NW of Sec. 27, Blk. B-29, Public School Land ..... Location.

WINKLER COUNTY

Atlantic & Maxwell's No. 1 Daugherty, 1,650 ft. from S and 2,310 ft. from E, Sec. 16, Blk. 74, Public School Land ..... Shut down 2,641 ft.
Magnolia Pet. Co.'s No. 3 Scarborough, 1,650 ft. from N and 990 ft. from W of Sec. 1, Blk. 77, Public School Land ..... Rig up.
A. W. Phillips' No. 2 Brown et al, 2,000 ft. S and W of NE, Sec. 4, Blk. B-5, Public School Land ..... Shut down 3,120 ft.
Liner Drlg. Co.'s No. 1 Campbell, 330 ft. from N and E cor., Sec. 2, Blk. B-5 ..... Shut down 4,250 ft.
Shell and The Texas Company's No. 1-B Cowden, 600 ft. from S and W of Sec. 39, Blk. B-5, Public School Land ..... Top of pay 2,585 ft.; oil and gas 3,100-16 ft.; flowing 124 bbls. fluid per day, 40 per cent water.
Simms Oil Co.'s No. 1 Sealy, C of SE, Sec. 49, Blk. F, G.M.M.B.&A. Sur. ..... Drlg. 2,490 ft.

WILDCAT OPERATIONS IN KANSAS

(Continued from Page 52)

Mallory's No. 1 Denchfield, SE NW Sec. 12-27-9 ..... Shut down 1,810 ft.
Bundy, Smith & O'Neil's No. 1 Ford, NE NW Sec. 28-25-13 ..... Shut down 50 ft.
F. Konkay et al's No. 1 Rock, NW NE NE Sec. 7-27-12.. Shut down 1,836 ft.

HARPER COUNTY

Beeler et al's No. 1 Bear, C NE Sec. 21-31-6w ..... Shut down 1,830 ft.

KINGMAN COUNTY

Slick, Pryor & Lockhart's No. 1 Wetherall, NE SW Sec. 36-29-6w ..... Rig.

KIOWA COUNTY

Phillips-Prairie's No. 1 Bean, NE SE Sec. 10-30-17w .... Drlg. 3,375 ft.
McKenna et al's No. 1 Ralson, C NE Sec. 14-28-20w .... Rig.

LYONS COUNTY

Griffith et al's No. 1 King, NW cor. Sec. 8-19-10 ..... Shut down 910 ft.

MARION COUNTY

Magnolia Pet. Co.'s No. 1 Davis, SE NW Sec. 18-21-2 .... Drlg. 1,805 ft.
Dixie and Arkansas Fuel's No. 1 Hacker, NW NE Sec. 6-17-1 ..... Drlg. 1,500 ft.
Marshall et al's No. 1 Higgins, NE cor. Sec. 33-19-5 .... Rig.

MARSHALL COUNTY

Swicker & Sincox's No. 1 Remple, C N half NW Sec. 22-4-9 ..... Drlg. 1,245 ft.
Brazier et al's No. 1 Runkel, SE NW Sec. 13-2-6 ..... Shut down 50 ft.

McPHERSON COUNTY

Simmons & Canary's No. 1 Bishop, NW SW Sec. 15-18-1w ..... Drlg. 2,990 ft.
Harry Skelly et al's No. 1 Neufeldt, SE NE Sec. 19-21-3w ..... Rig.

MIAMI COUNTY

Clark's No. 1 Vaughn, SE SW Sec. 28-17-22w ..... Shut down 1,200 ft.

MORTON COUNTY

Argus Prod. Co.'s No. 2 Drubilbis, C NW Sec. 9-34-39w ... Rigging up standard tools 2,586 ft.
Argus Prod. Co.'s No. 1 Morgan, C NW Sec. 8-33-39w .... Rig on ground.
Argus Prod. Co.'s No. 1 Tillet, C SW Sec. 21-34-39w ..... Drlg. 2,514 ft.
Argus Prod. Co.'s No. 1 Sullivan, C NW Sec. 29-34-39w .. Drlg. 1,500 ft.
Argus Prod. Co.'s No. 1 Burton, C SE Sec. 11-33-40w ..... Drlg. 2,545 ft.
Argus Prod. Co.'s No. 1 Mangels, C SE Sec. 4-33-39w .... Drlg. 3,250 ft.
Argus Prod. Co.'s No. 1 Morgan, C SW Sec. 6-33-39w .... Completed 2,510-2,750 ft.; 2,000,000 ft. gas.
Argus Prod. Co.'s No. 1 Mangels, C NE Sec. 20-33-39w ... Completed 2,482-2,700 ft.; 8,000,000 ft. gas.
Argus Prod. Co.'s No. 1 Garner, C SE Sec. 18-33-39w .... Rigging up standard tools 2,459 ft.
Argus Prod. Co.'s No. 1 Watson, C NE Sec. 27-34-40w ... Rigging up standard tools 2,440 ft.
Argus Prod. Co.'s No. 1 Thompson, C NW Sec. 18-34-39w. Completed 2,481-2,810 ft.; 3,500,000 ft. gas.
Hydraulic Oil Co.'s No. 1 State Land, NW SE Sec. 22-24-43w ..... Drlg. 2,308 ft.; gas at 1,200-10 ft. and at 1,350 ft.
McNabb et al's No. 1 Rickart, C SE Sec. 5-35-39w ..... Completed 2,660-2,787 ft.; 6,000,000 ft. gas.

MORRIS COUNTY

Henderson et al's No. 1 Selsman, SW SE Sec. 24-16-9 ... Rig.
Urschell et al's No. 1 Scott, NE NW Sec. 6-16-6 ..... Shut down 2,420 ft.

OSAGE COUNTY

Riggs & Smith's No. 1 Wood, SE NW Sec. 21-14-15 ..... Drlg. 410 ft.

PAWNEE COUNTY

Skelly Oil Co.'s No. 1 Milhouse, C SE Sec. 34-23-17w .... Drlg. 4,607 ft.

PRATT COUNTY

Wilcox O. & G. Co.'s No. 1 Bappin, SW NW Sec. 7-26-15w ..... Drlg. 4,098 ft.

RENO COUNTY

Shell Pet. Corp.'s No. 1 Popp, NW cor. Sec. 11-25-5w .... Drlg. 1,580 ft.
E. L. Study and H. L. Turner's No. 1 Haury, NE NW Sec. 1-23-4w ..... Drlg. 2,760 ft.
Phillips Pet. Co. and Tom Palmer's No. 1 Harsch, NE SE Sec. 14-26-5w ..... Drlg. 3,215 ft.
United Pet. Co.'s No. 1 Houston, NW cor. Sec. 4-22-10w.. Drlg. 2,235 ft.
C. A. Cheney and M. M. Valerius' No. 1 Stevens, C NE SE NE Sec. 6-26-7w ..... Drlg. 3,830 ft.

RICE COUNTY

United Pet. Co.'s No. 1 Willman, NE cor. Sec. 29-21-9w.. Rig.
Gypsy Oil Co.'s No. 1 Koch, SE NE NW Sec. 35-20-9w .. Drlg. 2,435 ft.
Hershey Golden & Skelly's No. 1 Brandenstein, Sec. 10-19-10w ..... Rig on ground.
McPherson and Shell's No. 1 Jennings, NE SW NW Sec. 29-18-6w ..... Drlg. 3,432 ft.
Miller & Brown's No. 1 Schartz, Sec. 14-20-10w ..... Drlg. 2,988 ft.
Hoffner, Lee & Shell's No. 1 Slad Farm Corp., C SW Sec. 33-19-6w ..... Drlg. 2,930 ft.
Tatlock et al's No. 1 Ploog, C SW SE Sec. 33-18-9w .... Silicious lime 3,253-54 ft.; swabbed 100 bbls.
Danciger et al's No. 1 Bell, C SW Sec. 16-19-8w ..... Abandoned 3,705 ft.

ROOKS COUNTY

Streeter-Stearns' No. 1 Conger, SE NW NE Sec. 16-10-16w ..... Shut down 250 ft.

RUSH COUNTY

Prairie et al's No. 1 Lecker, NW SW SW Sec. 5-16-18w.. Drlg. 1,175 ft.
Syndicate Oil Co.'s No. 1 Lannen, C SW Sec. 11-18-16w .. Location.
McPherson O. & G. Co.'s No. 1 Brack, C NW Sec. 24-17-16w ..... Drlg. 3,100 ft.
Syndicate Oil Co.'s No. 1 Mohr, C SW Sec. 2-18-16w .... Drlg. 3,200 ft.
Danciger Oil & Refining Co.'s No. 1 Nave, NW cor. Sec. 26-17-17w ..... Total depth 3,606 ft.; shut down

RUSSELL COUNTY

Streeter & Stearns' No. 1 Mitchell, SE cor. Sec. 6-15-14w. Drlg. 2,195 ft.
Empire O. & R. Co.'s No. 1 Herbel, NW NE SW Sec. 26-14-14w ..... Drlg. 2,840 ft.
Slick et al's No. 1 Berrick, SE SW Sec. 23-15-13w ..... Show oil, gas and water 3,292-3,322 ft.; shut down.
Empire and Prairie's No. 2 Ochs, SE NE Sec. 23-15-14w.. Completed 3,361-71 ft.; 230 bbls.
Austin Drlg. Co.'s No. 1 Rochfellow, SE cor. Sec. 6-13-12w ..... Shut down 1,884 ft.
Gilbreath et al's No. 1 Bratton, C NE Sec. 33-11-13w .... Shut down 1,010 ft.

SEDGWICK COUNTY

Newman et al's No. 1 Bawly, SE NW NE Sec. 2-27-2 .. Drlg. 2,540 ft.
Tavender et al's No. 1 McLean, SE SW SE Sec. 23-26-1w ..... Shut down 975 ft.

SALINE COUNTY

Twin Mounds Oil Co.'s No. 1 Weis, C W half NE NW Sec. 20-13-4w ..... Drlg. 2,042 ft.

STAFFORD COUNTY

Boucher Oil's No. 1 Christenson, NW cor. Sec. 22-22-11w.. Drlg. 3,050 ft.
Boucher Oil's No. 1 Groves, NE cor. Sec. 9-22-11w ..... Drlg. 2,730 ft.
Midwest's No. 36 Richardson, SE cor. Sec. 36-22-12w .... Drlg. 2,955 ft.

STEVENS COUNTY

Agate Oil Co.'s No. 1 Gregory, NW NE Sec. 19-33-38w .. Rigging up standard tools 2,470 ft.
Argus Prod. Co.'s No. 1 Hershey, C NW Sec. 26-34-37w .. Rig.
Argus Prod. Co.'s No. 1 Ehrhard, C NW Sec. 11-35-39w .. Drlg. 625 ft.
Argus Prod. Co.'s No. 1 Wiley, C NE Sec. 4-35-37w ..... Drlg. 480 ft.
Argus Prod. Co.'s No. 1 Ridpath, C SE Sec. 27-34-37w .. Drlg. 710 ft.
Argus Prod. Co.'s No. 1 Gibbons, C SE Sec. 29-34-37w .. Drlg. 988 ft.
Argus Prod. Co.'s No. 1 Knier, C SW Sec. 27-34-37w ..... Drlg. 2,230 ft.
Argus Prod. Co.'s No. 1 Harrison, C SW Sec. 30-34-37w .. Drlg. 1,000 ft.
Argus Prod. Co.'s No. 1 Irwin, C SE Sec. 10-35-37w ..... Rig.
Argus Prod. Co.'s No. 1 Stone, C NE Sec. 3-33-39w ..... Completed 2,532-2,705 ft.; 8,000,000 ft. gas.
Argus Prod. Co.'s No. 1 Libon, C NE Sec. 2-34-39w ..... Rigging up standard tools 2,516 ft.
Barrington et al's No. 1 Creamer, C NW Sec. 2-35-39w.. Drlg. 2,000 ft.
Freedell Const Co.'s No. 1 Presinger, C SE Sec. 22-31-38w ..... Drlg. 2,446 ft.
Mangle et al's No. 1 Youngren, C SE NW Sec. 24-32-39w ..... Shut down 2,523 ft.
McNabb and Mid-Kansas' No. 1 Rhinehart, C NE Sec. 23-32-39w ..... Rig.
McNabb et al's No. 1 Porter, Sec. 4-31-37w ..... Drlg. 1,950 ft.
W. Sidwell et al's No. 1 Kelly, SW cor. NE Sec. 16-34-38w ..... Shut down 1,600 ft.

SUMNER COUNTY

Magnolia Pet. Co.'s No. 1 Shriver, NW SW Sec. 9-33-2 .. Fishing 1,980 ft.
Disney et al's No. 1 Fay, C E half SE Sec. 14-34-1w ... Rig.
Davidson et al's No. 1 Strickland, SW cor. SE Sec. 12-35-1w ..... Rig.

WASHINGTON COUNTY

Sincox et al's No. 1 Penwell, NW SE NE Sec. 16-3-3 .... Drlg. 510 ft.

WILDCAT OPERATIONS IN NEBRASKA

FRANKLIN COUNTY

U. R. Drlg. Co.'s No. 1 Brunkle (twin well), C NW SW NE Sec. 2-3n-13w ..... Rig.

CHASE COUNTY

Chase Pet. Co.'s No. 1 Ingold, C NE Sec. 24-6n-38w .. U. R. 5-in. csg.; T. D. 4,265 ft.

FURNAS COUNTY

Southwestern Pet. Corp. of Nebraska's No. 1 Montague, SE SW NW Sec. 28-1n-22w ..... Shut down 1,750 ft.
Graham Bros.' No. 1 Edwards, NW SW Sec. 13-2n-22w.. Shut down 3,250 ft.

PHELPS COUNTY

Trees Oil's No. 1 Bergan, Sec. 22-6-19w ..... Rig on ground.

RICHARDSON COUNTY

Norton et al's No. 1 Albin, NE cor. Sec. 26-1-14 ..... Miss. lime 2,200 ft.; landing 8-in. casing.

ROCK COUNTY

North Central Dev. & Drlg. Co.'s No. 1 Leonard, SE cor. NE Sec. 14-32-18w ..... Drlg. 900 ft.

WEBSTER COUNTY

Mid-Kansas Exploration Co.'s No. 1 Platt, C SE one-half Sec. 2-1n-11w ..... Drlg. 2,125 ft.

WILDCAT OPERATIONS IN OKLAHOMA

(Continued from Page 50)

Sinclair Oil & Gas Co.'s No. 1 Howell, C SW SW Sec. 14-26-24w ..... 7,000,000 ft. gas; fishing 5,330-40 ft.

HASKELL COUNTY

I. T. I. O.'s No. 1 Blake, SW NW Sec. 3-10-21 ..... Location.
Mid-Western's No. 1 Poister, C NE SE Sec. 33-10-22 .... Drlg. 3,265 ft.
Holden's No. 1 Phillip, SE cor. Sec. 3-9-18e ..... Shut down 1,860 ft.
Marion Oil's No. 1 Sanders, NW NE NW Sec. 10-9-18e .. Shut down 2,387 ft.
Sanboise Gas' No. 1 Unknown, SW NW SE Sec. 32-9-21e.. Shut down 2,100 ft.

HUGHES COUNTY

Wright et al's No. 1 Ott, SE SW Sec. 15-5-11 ..... Shut down 1,645 ft.
Canady et al's No. 1 Kanard, NW SW Sec. 29-9-12 ..... 1,000,000 ft. gas 2,284 ft.; drlg. 4,500 ft.
Irwin et al's No. 1 Jones, SE NW Sec. 30-5-10 ..... Drlg. 4,270 ft.

KAY COUNTY

Boucher Oil Co.'s No. 1 Jefferson, NE SW Sec. 32-26-1w ..... Rig.
Alco Royalty Co.'s No. 1 Wolf, SE SW SE Sec. 34-26-2w.. Drlg. 3,642 ft.
Blankinship Petroleum Co.'s No. 1 Hansen, SW NW SW Sec. 17-27-2 ..... Drlg. 3,616 ft.

KINGFISHER COUNTY

Prairie and Slick's No. 1 Wright, C NW SW Sec. 23-15-5w ..... Drlg. 2,000 ft.
Galt Brown's No. 1 Wolf, NW SE Sec. 6-16-7w ..... Shut down 6,015 ft.

KIOWA COUNTY

Merrick Oil Co.'s No. 1 Kelly, NW cor. SE Sec. 20-7-17w. Abandoned 1,525 ft.

LEFLORE COUNTY

Red Bank Oil Co.'s No. 1 fee, SE SW NW Sec. 23-9-24 .. Drlg. 6,131 ft.

LATTIMER COUNTY

Limestone Oil & Gas Co.'s No. 1 Murray, NE cor. Sec. 25-5-18 ..... Shut down 1,450 ft.

LINCOLN COUNTY

J. J. Deaner et al's No. 1 Knox, NE NW Sec. 28-17-2 .... Drlg. 4,570 ft.
Atlantic Oil Prod. Co.'s No. 1 Parker, SE NW Sec. 5-14-6 ..... Drlg. 3,125 ft.; R.U.S.T.
Magnolia Pet. Co.'s No. 1 Winship, NE SW Sec. 2-13-4 .. Drlg. 4,560 ft.
Tom Slick Oil Co.'s No. 1 Hammer, SE NW NW Sec. 35-16-2 ..... T. D. 6,102 ft.; plugged back to 4,970-5,000 ft.; shot 60 qts.; water; abandoned.

LOGAN COUNTY

Slick & Ramsey's No. 1 Jones, SE NW Sec. 24-17-2w .... Drlg. 2,354 ft.
Prairie and Slick's No. 1 Morgan, NW NE Sec. 33-16-1w ..... Show oil 5,275-5,340 ft.
Eason Oil Co.'s No. 1 Young, C SW NE SW Sec. 34-17-4w. Drlg. 2,780 ft.

McINTOSH COUNTY

N. J. Weible's No. 1 Asbell, NE SW SE SE Sec. 35-12-17 ..... Abandoned 857 ft.
Patterson et al's No. 1 Smith, SW cor. NW SE Sec. 32-9-16 ..... Shot 240 qts. 5,446-5,559 ft.; shot went off up hole; fishing.

MURRAY COUNTY

Chieftain Royalty Corp.'s No. 1 Hendrix, SW SE NW Sec. 27-2-2 ..... Wilcox 2,354-70 ft.; water; abandoned.

MUSKOGEE COUNTY

Becker & Hutchinson's No. 1 May, SE NE Sec. 16-12-19.. Drlg. 500 ft.
Sioux Oil Co.'s No. 1 Unknown, NW SE Sec. 21-11-19 .... Shut down 1,011 ft.

NOBLE COUNTY

Weaver & Craigin's No. 1 Frederick, C SW NE Sec. 4-24-1w ..... Drlg. 2,425 ft.

OKFUSKEE COUNTY

Henry Oil Co.'s No. 1 Harjo, Sec. 36-12-9 ..... Drlg. 3,890 ft.
E. L. Robinson's No. 1 Rice, NW Sec. 2-10-9 ..... Location.
Shepard et al's No. 1 Nevens, SE NW SW Sec. 3-12-10.. Shut down 3,661 ft.

OKLAHOMA COUNTY

Cromwell-Franklin's No. 1 Lincoln Park, SW cor. Sec. 12-12-3w ..... Drlg. 3,770 ft.
L. C. Hivick's No. 1 Sunset Addition, NW SW NW Sec. 17-11-3w ..... Drlg. 4,610 ft.
Mid-Kansas Oil & Gas Co.'s No. 1 Messer, SW cor. Sec. 32-14-3w ..... Drlg. 6,233 ft.
Prairie and Slick's No. 1 Dill, SE NW Sec. 17-13-3w .... Drlg. 6,800 ft.
Warr et al's No. 1 Castle, SW NW Sec. 20-11-3w ..... Shut down 6,217 ft.
J. F. Cuniff, trustee's No. 1 Church Land, NE SW SE Sec. 17-12-4w ..... Fishing 6,532 ft.
Magnolia and Ramsey's No. 1 Johnson, C NE SW Sec. 35-13-3w ..... Drlg. 7,166 ft.
Ryan Consolidated's No. 1 Lawton, NE NW Sec. 3-11-2w.. Drlg. 6,882 ft.
Tom Slick Oil Co.'s No. 1 Martin, C NW NW Sec. 13-13-1w ..... T. D. 6,971 ft.; water; plugging back 3,250 ft.; abandoned.

OSAGE COUNTY

Western American Oil Co.'s No. 1, NW SE Sec. 28-23-6 .. Drlg. 2,240 ft.

PAWNEE COUNTY

L. E. Wentz' No. 1 G. Lilly, SE SW NE Sec. 26-22-3 .... Drlg. 1,530 ft.
Flynn & Morgan's No. 1 Jones, SW NE Sec. 22-20-5 .... Drlg. 1,757 ft.
Cochran et al's No. 1 Green, NE cor. SW Sec. 15-23-5 .. Rig.

PITTSBURG COUNTY

Empire O. & R. Co.'s No. 1 Williams, C NE SE Sec. 33-7-16e ..... Fishing 3,975 ft.

POTTAWATOMIE COUNTY

The Texas Company's No. 1 Knight, SW SE Sec. 3-8-3 Spudding.

ROGER MILLS COUNTY

Bucy & Stone's No. 1 Williams, C SW Sec. 23-12-24w .. Shut down 2,245 ft.

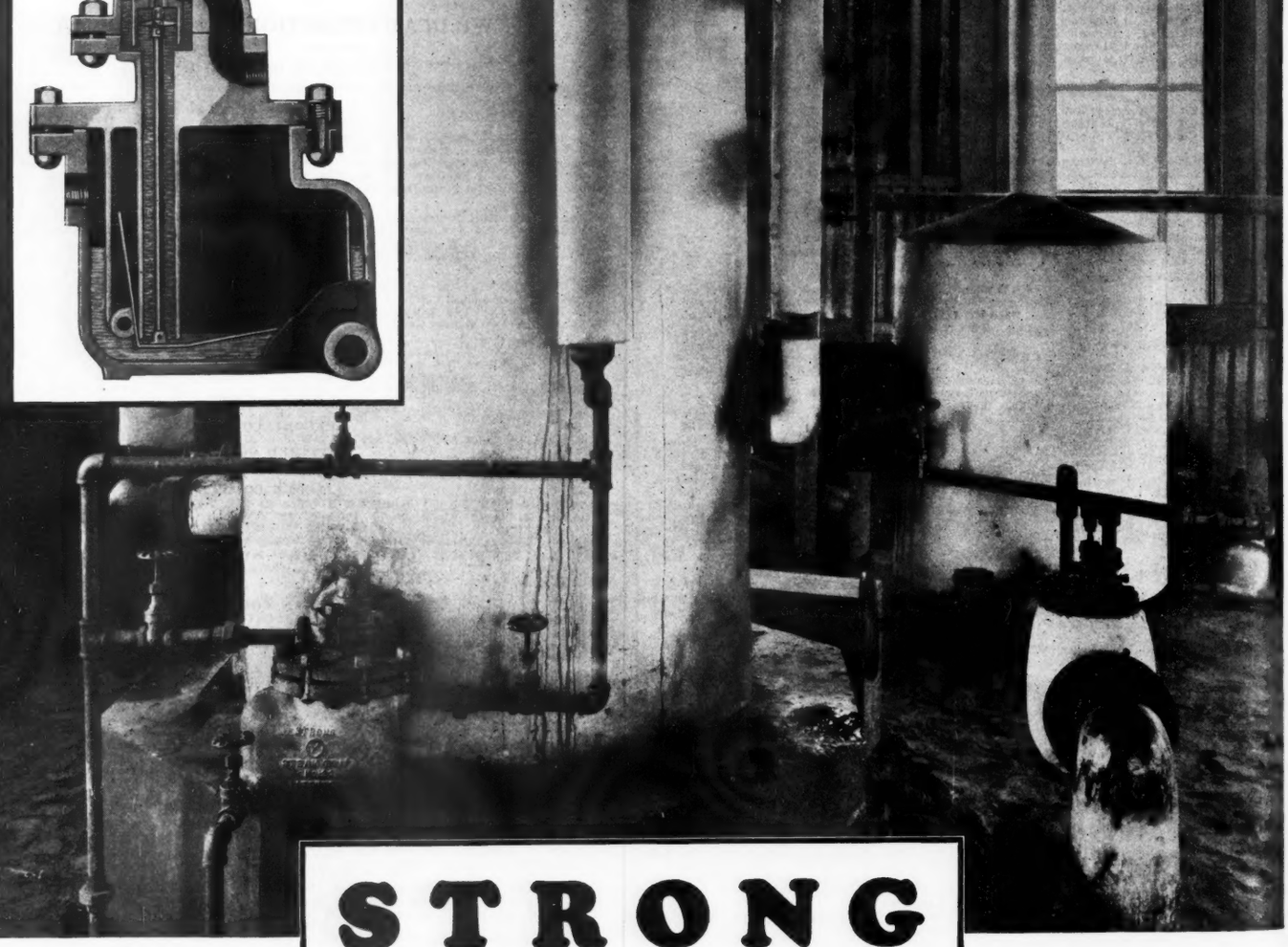
Strong traps on absorption plant still

IN the absorption gasoline plant of the Oklahoma Power & Water Company at Sand Springs, Okla., Strong traps are used generally for draining steam lines of stills. Unfailing service and virtually no cost for maintenance is the record, as usual, of Strong traps in refinery service.

In these highly efficient machines for draining condensate the result of many years experience and engineering development is apparent from the care with which the trap is made, its scientific design, its sturdy specifications and its valve seat and disc made of *ANUM-METL*.

ANUM-METL is an almost indestructible alloy, exclusive to Strong traps. Valve seats and discs of this material cannot wire-draw. And a Strong trap cannot become airbound.

Add to these reasons for the wide-spread use of Strong traps the fact that these machines can be obtained in full rated capacities for any purpose in semi-steel, cast steel, and drop forged steel, and can be shipped out of stock on short notice, and you have before you a full explanation of why Strong traps are chosen so frequently for field and refinery service.



STRONG CARLISLE & HAMMOND

For the gasoline plant and refinery there are Strong Anti-Freeze Relief Valves, Atomizing or Blending Valves, Cushion Non-Return Valves for compressor and field lines, Gas Engine Stops,

Gasoline and Steam Separators, Mineral Seal Oil Traps, Separating Traps, Vacuum Traps, Lifting Traps, Steam Traps, and combination Vacuum-Pressure Relief Valves.

MANUFACTURERS OF STRONG SPECIALTIES — CLEVELAND, OHIO

L. C. Hivick's No. 1 Davis, C NW NE Sec. 4-11-26w ....Shut down 2,905 ft.

SEMINOLE COUNTY

Pure Oil Co.'s No. 1 Shaffer Ashby, SE NE Sec. 22-7-5..Drlg. 4,190 ft.
T. Adkins et al's No. 1 McGilbray, SE NE Sec. 4-8-8 ....Drlg. 4,145 ft.
Sunray Oil Co.'s No. 1 Sunday, NW SE Sec. 35-5-5 .....Location.

WASHITA COUNTY

Kauffman et al's No. 1 Nelson, NE cor. Sec. 1-8-14w ....Drlg. 1,235 ft.
Petroleum Holdings, Inc.'s No. 1 Musie, NW cor. Sec. 10-9-20w .....Shut down 280 ft.

WOODS COUNTY

Peerless O. & G. Co.'s No. 1 Crowell, C NW NE Sec. 23-28-16w .....Abandoned 6,235 ft.
Gypsy-Prairie et al's No. 1 Thompson, SE cor. SW Sec. 10-25-15w .....Shut down 6,104 ft.
Sinclair Oil & Gas Co.'s No. 1 Showwalter, C SW SW Sec. 33-27-16w .....Drlg. 7,161 ft.

WOODWARD COUNTY

Farrond et al's No. 1 Unknown, SE cor. SW SE Sec. 2-22-17w .....Shut down 1,387 ft.
Prairie Oil & Gas et al's No. 1 Wilbur, NE cor. NW Sec. 22-23-17w .....Shut down 7,445 ft.
Burgoyne Brothers' No. 1 Merkins, SW cor. SE NE Sec. 15-21-19w .....Shut down 1,910 ft.

OKLAHOMA PANHANDLE

CIMARRON COUNTY

Magnolia's No. 1 School Land, C SW NE Sec. 27-5-5 ....Drlg. 3,900 ft.

TEXAS COUNTY

Argus Prod. Co.'s No. 1 Fischer, C NW Sec. 29-6-14 ....Location.
Argus Prod. Co.'s No. 1 Parker, C NW NW Sec. 18-6-15 .....Rig on ground.
Three Way Oil Co.'s No. 1 Crane, SW NW Sec. 11-1-18 .....Drlg. 4,280 ft.
Palo Alto Oil Co.'s No. 1 Graves, NE SW SW Sec. 23-2-18e .....Spudded; shut down.

SOUTHERN OKLAHOMA

ATOKA COUNTY

Bryant-Croxton's No. 1 Mason, NW SE NW Sec. 4-1s-14..Shut down 1,850 ft.
Brookshire's No. 1 Guinn, NW cor. Sec. 18-3s-10 .....Shut down 100 ft.

BRYAN COUNTY

Bush et al's No. 1 Commerce Trust, NE cor. Sec. 35-6s-9 .....Shut down 525 ft.
Johnson et al's No. 1 Ussery, SE SW SE Sec. 14-16s-7e..Drlg. 400 ft.
Marshall's No. 2 fee, C SW SE NW Sec. 26-5s-7 .....Shut down; 6-in. csg. 265 ft.

CARTER COUNTY

Campen-Lasater Co.'s No. 1 Anderson, NE cor. SE NE SE Sec. 32-4s-2 .....Shut down 2,590 ft.

CHOCTAW COUNTY

Choctaw Petroleum Co.'s No. 1 Wilson, SW cor. SW Sec. 15-6s-19e .....Shut down 1,345 ft.

COMANCHE COUNTY

Pelwin Oil Co.'s No. 1 Tafepirdy, C NW NE NE Sec. 5-1s-9w .....T. D. 2,513 ft.; abandoned.

COTTON COUNTY

H. J. Dillard's No. 1 McMillan, SE NW Sec. 2-4s-13w ..Drlg. 500 ft.

LOVE COUNTY

Hobbs et al's No. 1 Roberts, NE cor. SW Sec. 20-6s-3w..Shut down 3,130 ft.
Gilcrease Oil's No. 1 Burkhart, NE NW Sec. 13-6s-1 ....Rig.

MARSHALL COUNTY

Pace et al's No. 1 Hicks, SW NW Sec. 8-6s-7 .....Drlg. 390 ft.
Walker et al's No. 1 Parks, NW NE NW Sec. 5-5s-5 ....Drlg. 650 ft.
McCrory et al's No. 1 Adams, NE SW SE Sec. 31-7s-6 ..Rig.
Akers et al's No. 1 Spicer, SW SE SE Sec. 33-5s-7e ....Drlg. 370 ft.

McCURTAIN COUNTY

Milton et al's No. 1 Vase, SW NW Sec. 26-6s-21 .....Shut down 2,287 ft.

STEPHENS COUNTY

R. Southard's No. 1 McKinney, NE cor. Sec. 25-1-8n ....Shut down 1,060 ft.
Wirt Franklin Petroleum Corp.'s No. 1 McPhail, NW SE Sec. 1-2s-7w .....T. D. 4,529 ft.; shot 45 qts. at 4,133-52 ft.; cleaning out.

WILDCAT OPERATIONS IN LOUISIANA-ARKANSAS

(Continued from Page 57)

CONCORDIA PARISH

A. C. Glassell's No. 1 Pittsfield Plantation, N 9°, E 1,320 ft., SW cor., Sec. 41-8-10 .....Blew out between 1,392-1,450 ft.; estimated 1,000,000 ft. gas; bridged; recmtd. 8¼-in. 1,370 ft.; S.D.; T.D. 1,453 ft.

Joe Marr et al's No. 1 Maxwell, C, Sec. 35-3n-8e .....8-in. stuck at 1,200 ft; T.D. 2,820 ft.

DE SOTO PARISH

Ark.-La. P. L. Co.'s No. 2 Johnson, 2,144 ft. N, 1,343 ft. W, C, Sec. 7-11-13 .....Drlg. 2,782 ft.
Joe Burnham et al's No. 1 Mary Hood, 320 ft. W, 201 ft. S, NE cor. SE SE NE, Sec. 2-11-14 .....S.D. for fuel 1,960 ft.
J. W. Clark's No. 1 Tidwell, NW cor. NW, Sec. 22-13-14..Rig up.
J. W. Clark's (was Sam Gold et al's) No. 1 Platt, 200 ft. S, 200 ft. W, NE cor. SW, Sec. 23-13-14.....Began drlg. Aug. 2; 12½-in. at 118 ft.
Gulf Ref. Co.'s No. 1 Dry, 2,390 ft. N, 200 ft. E, SW cor., Sec. 14-11-15 .....Drlg. shale 2,482 ft.
Bud Harrell's No. 1 Horton, 450 ft. E, 150 ft. N, SW cor., Sec. 4-11-11 .....S.D. 1,060 ft.
Frank Melat, Inc.'s No. 1 Schryver, 175 ft. E, 175 ft. N, SW cor. NW SW, Sec. 35-14-13.....W.O.S.R. 2,819 ft.
Michlouzanna O. & G. Co.'s No. 1 Payne, 410 ft. S, 398 ft. E, NW cor., Sec. 12-11-16 .....S.D. 2,600 ft.
Odell & Lawton's No. 1 Tidwell-Tull, 300 ft. N, 600 ft. E, SW cor. NW, Sec. 11-13-14 .....S.D. for wtr. 2,628 ft.
Pelham & Bumby's No. 1 Rhodes, C S½ SE, Sec. 32-13-14..Base of chalk 1,904 ft; small S.G. in sandy lime 1,912-17 ft; drlg. shale 2,130 ft.
Philp et al's No. 1 Talbot, 220 ft. S, 730 ft. W, NE cor. NW NE, Sec. 9-13-13 .....Derrick.
R. O. Roy's No. 1 Nelson, 660 ft. S, 660 ft. E, NW cor., Sec. 36-15-13 .....S.D. 2,000 ft.

JACKSON PARISH

El Dorado Chief O. & G. Co.'s No. 1 Sou. Advance Paper Bag Co., 225 ft. N, 275 ft. E, SW cor. SW NE, Sec. 35-15-4 .....S.D. 1,400 ft.

LINCOLN PARISH

Ark. Fuel Oil Co.'s No. 1 Lewis & Co., 300 ft. N, 300 ft. W, SE cor. NW SE, Sec. 26-20-4 .....Reaming to bottom 4,234 ft.

MOREHOUSE PARISH

Pelican Nat. Gas Co.'s No. 1 Tensas Delta Land Co., 1,320 ft. N, 660 ft. E, NW cor., Sec. 17-18-6.....Location.
Ruston Drlg. Co.'s No. 1 Tucker & Platt, 660 ft. N, 360 ft. W, SE cor. NE, Sec. 8-20-6 .....Tested S.W. 3,039 ft; arranging to abd.

NATCHITOCHES PARISH

W. M. Coats' No. 1 Collins, 730 ft. N, 50 ft. E, C, Sec. 28-9-10 .....D.S. test dry 2,186-2,270 ft; S.D; W.O. 2,270 ft.
J. W. Cooper et al's No. 1 Cooper, NW SW, Sec. 35-11-10..Rig up.
S. D. McDaniel's No. 2 Clark & Morse, 800 ft. E, 350 ft. N, C, Sec. 23-5-6 .....Tested 1,000,000 ft. gas and S.W. 3 ft.; S.D. for orders; T.D. 2,526 ft.
Robeline O. & G. Co.'s No. 1 Winn, 558 ft. N, 348 ft. E, SW cor. SE, Sec. 7-8-9 .....S.D. 1,600 ft.

RAPIDES PARISH

Ayers Bros.' No. 1 Wickliff, 2,790 ft. N, 150 ft. E, SW cor., Sec. 9-5n-2e .....S.D. for wtr. 3,310 ft.

RED RIVER PARISH

E. C. Lucas' No. 1 La. Pecan Co., Sec. 26-13-11 .....Arranging to set 6-in. at 2,440 ft; 14-ft. sand 2,460 ft.
Geo. L. Pace et al's No. 1 Clarkson, 200 ft. S, 200 ft. E, NW cor. NE, Sec. 30-12-9 .....Topped chalk 1,247 ft; coring chalk rock 1,635 ft.

RICHLAND PARISH

Austin & McDonald's No. 1 Hunt, 594 ft. N, 660 ft. E, SW cor., Sec. 13-17-5 .....Cmtd. 12½-in. 200 ft.
Austin & McDonald's No. 2 Millsaps, SW cor., Sec. 17-17-6 .....Waiting orders; T.D. 2,657 ft.
Austin & McDonald's No. 3 Millsaps, 1,980 ft. S, 660 ft. E, NW cor., Sec. 16-17-6 .....Tested S.W.; W.O. 2,477 ft.
Austin & McDonald's No. 4 Millsaps, NW cor., Sec. 16-17-6 .....Location.
Austin & McDonald's No. 5 Millsaps, 2,640 ft. N, 1,320 ft. W, SE cor., Sec. 8-17-6 .....Derrick.
W. C. Feazel's No. 1 Landrum, 620 ft. N, 4,573 ft. E, SW cor., Sec. 6-16-7 .....Derrick.
Island Gas Co.'s No. 1 Noe, 1,902 ft. N, 660 ft. W, SE cor., Sec. 3-16-5 .....Rig up.

SABINE PARISH

Ark.-La. P. L. Co.'s No. 1 Whitney, 660 ft. S, 660 ft. E, C, Sec. 28-10-14 .....Coring 3,144 ft.
Boone, trustee's No. 1 J. B. Hill, NE, Sec. 4-6-11 .....(No check); derrick.
LeGrand Oil Co., Inc.'s No. 1 J. W. Hale, 200 ft. N, 200 ft. E, SW cor. NE NW, Sec. 1-7-13 .....Location.
Lohman & Walker's No. 1 Hubley, 330 ft. N, 330 ft. W, SE cor. SE NE, Sec. 21-7-11 .....Small gas blowout in sand 1,311-13 ft; arranging to cmt. 8-in. 1,313 ft.
Longoria et al's No. 1 Belton, 330 ft. S, 330 ft. E, C, NE, Sec. 31-9-13 .....Rig up.
Loring Oil Co.'s No. 1 Peavy-Wilson Lbr. Co., 200 ft. S, 330 ft. W, NE cor. SW NE, Sec. 21-6-13.....Drlg. lime and shale 4,700 ft.
Lohman et al's No. 1 Wyatt Lbr. Co., 150 ft. S, 330 ft. E, NW cor. NE SW, Sec. 18-4-11 .....Rig up.
Magnolia Pet. Co.'s No. 1 Glauque, 484 ft. N, 390 ft. E, SW cor. NW SW, Sec. 26-7-14 .....Drlg. 930 ft.
J. C. McDaniel & Lieber's No. 1 Batson, 675 ft. N, 318 ft. E, SW cor. SE, Sec. 16-18-12 .....Show oil; bailed dry; W.O. 2,526 ft.
Paramount O. & G. Co.'s No. 1 Woolems, 330 ft. N, 330 ft. W, SE cor. NE NW, Sec. 11-6-12 .....S.D. 1,656 ft.
Pelican Nat. Gas Co.'s No. 3 La. Long Leaf Lbr. Co., 200 ft. S, 200 ft. W, NE cor. SW, Sec. 4-7-11 .....6-in. 2,318 ft; T.D. 2,344 ft.
Pelican Nat. Gas Co.'s No. 3 Sabine Lbr. Co., 200 ft. S, 200 ft. W, NE cor. SE NW, Sec. 6-7-11 .....6-in. 2,222 ft; T.D. 2,237 ft.
D. H. Riddick's No. 1 Scretchfield, 400 ft. E, 400 ft. N, SW cor. NW SE, Sec. 18-9-12 .....S.D. 3,280 ft.
H. T. Stacey et al's No. 1 Polly, NE cor. NE NE, Sec. 18-8-12 .....Rig up.

TENSAS PARISH

A. R. Willis et al's No. 1 Currey, 1,320 ft. S, 1,320 ft. E, NW cor., Sec. 39-11-12 .....S.D. 2,300 ft.

WEBSTER PARISH

J. P. Evans et al's No. 1 Crichton Co., NE cor. NW NE, Sec. 31-18-8 .....Began drlg. July 30; 10-in. 180 ft; T.D. 200 ft.

ARKANSAS

ASHLEY COUNTY

J. D. Marcum Co.'s No. 1 McGarry, 300 ft. W, 100 ft. S. C, Sec. 10-19-4 .....D.S. test 3,555 ft.; S.W.; plugging back for retest.

CALHOUN COUNTY

Tidal Oil Co.'s No. 1 Freeman-Smith Lbr. Co., 150 ft. C S line, NE NW, Sec. 3-16-14 .....D.S. test 2,456-2,506 ft.; S.W. 2,488-2,506 ft; dry; S.W. 2,534-49 ft; cored S.W. sand 2,843 ft; drlg. 2,935 ft.

CLEBURNE COUNTY

Cosden Oil Co. of Ark.'s No. 1 Donophan, 100 ft. S, 660 ft. E, NW cor. SW SE, Sec. 19-9-10 .....S.D. 3,875 ft.
Donnelly-Craver et al's No. 1 Donophan Lbr. Co., SE cor. NW, Sec. 33-11-9 .....S.D. for wtr. 1,575 ft.

COLUMBIA COUNTY

S. Y. Dorfman et al's No. 1 Merritt, 923 ft. S, 160 ft. W, NE cor. SE NW, Sec. 25-19-22 .....Cmtd. 12½-in. 165 ft; drlg. 650 ft.

DREW COUNTY

McClintock & Goodka's No. 1 Ogles, 920 ft. W, 400 ft. S, NE cor., Sec. 35-13-5 .....T.A. 2,625 ft.

FRANKLIN COUNTY

Red Bank Oil Co.'s No. 1 Edtin, SW cor., Sec. 33-10-26 .....S.D. 2,399 ft; drlg. wtr. well.

GARLAND COUNTY

Givens et al's No. 1 Garrett, 660 ft. S, 660 ft. W, C, Sec. 1-3-19 .....Drlg. sandy lime 3,617 ft.

HOT SPRING COUNTY

Anisman et al's No. 1 Hinson est., NE NE, Sec. 19-4-16..Location.
J. R. Lockhart's No. 1 Cunningham, 285 ft. S, 285 ft. W, NE cor., Sec. 11-5-16 (reported in Grant County in error) .....Derrick.

LAFAYETTE COUNTY

Crawford Drlg. Co.'s No. 1 Vaughn, 200 ft. S, 200 ft. W, NE cor. SE NE, Sec. 25-19-25 .....Rig up.

LINCOLN COUNTY

B. F. Thompson, trustee's No. 1 McGhee, 330 ft. S, 150 ft. W, C, Sec. 8-8-7 .....Rigging up.

LITTLE RIVER COUNTY

A. L. Buck's No. 1 Greason, NW NW, Sec. 25-12-32 ....S.D. 2,502 ft.

LOGAN COUNTY

J. H. Flowers' No. 1 J. H. White, Sec. 13-6-26 .....U.R. 5 3/16-in. 3,570 ft.; T.D. 3,610 ft.

MADISON COUNTY

J. W. Baxter's No. 1 Hallem, C NE SW, Sec. 17-16-26.....S.D. 540 ft.

MILLER COUNTY

Lenz et al's No. 1 G. W. Johnson, 400 ft. S, 400 ft. W, NE cor. SW, Sec. 24-15-26 .....T.D. 2,849 ft; estimated 65 bbls; arranging to set tubing.

OUACHITA COUNTY

Anderson & Wimmer's No. 1 Buck, Sec. 7-15-7 .....Sidetracking D.S.; T.D. 2,735 ft.
Belmont et al's No. 1 Buck, SE cor. SE SW, Sec. 16-15-17.Cmtd. 12½-in. 120 ft.
A. B. Turner, trustee's No. 1 Dave Brown, 220 ft. N, 220 ft. E, SW cor., Sec. 23-15-18 .....Rig up.

PIKE COUNTY

E. R. Henderson's No. 1 Tilyou, 660 ft. W, 500 ft. S, NE cor. NE SE, Sec. 26-8-14 .....Location.

POPE COUNTY

Ark.-La. P. L. Co.'s No. 1 J. E. Moore, 330 ft. N, 330 ft. E, SW cor. SE NE, Sec. 16-9-21 .....Drlg. hard shale 900 ft.
Cosden Oil Co.'s No. 1 Mo. Pac. R.R., 660 ft. N, 660 ft. E, SW cor. NW SE, Sec. 13-9-19 .....Drlg. hard sand 4,864 ft.

SCOTT COUNTY

Heavener O. & G. Co.'s No. 1 Riser, Sec. 36-4-26.....Straightening hole; T.D. 1,530 ft.

SEBASTIAN COUNTY

W. M. Greeson's No. 1 Spears, Sec. 9-7-29 .....Tested S.W. 3,515 ft; W.O.
Mansfield Gas Co.'s No. 14 Fee, Lot 10, Sec. 1-4-31.....S.D. for wtr. 330 ft.
Ozark Nat. Gas Co.'s No. 10 Weaver, 660 ft. N, 660 ft. W, SE cor. SE NE, Sec. 27-8-30 .....Straightening hole; T.D. 2,640 ft.

UNION COUNTY

S. B. Hickman's No. 1 Hogg, 330 ft. S, 150 ft. E, NW cor. SE SE, Sec. 35-16-17 .....Dry 1,987-2,079 ft.; fishing 2,157 ft.
Marine Oil Co.'s No. 4-A Thompson, 330 ft. N, 330 ft. W, SE cor. SW NE, Sec. 10-18-13 .....Drlg. lime 3,285 ft.
Modisette Drlg. Co.'s No. 4 Union Sawmill, 330 ft. W, 300 ft. N, SE cor., Sec. 14-18-14 .....Location.
South El Dorado Oil Co.'s No. 1 Traylor, 330 ft. N, 138 ft. W, SE cor. NW NE, Sec. 9-19-15 .....W.O.S.R.; 700 ft. fluid; T.D. 2,186 ft.

VAN BUREN COUNTY

Glenn Kohle et al, trustee's No. 1 Scalan, 200 ft. S, 200 ft. W, NE cor. SE NW, Sec. 5-19-13 ..... S.D. 50 ft.

WASHINGTON COUNTY

Delbert & Graves' No. 1 Cunningham, Sec. 14-15-32 ..... S.D.; W.O. 602 ft.
C. H. Willoughby's No. 1 Jones, Sec. 34-16-30 ..... S.D; W.O. 1,650 ft.
Lincoln Leaseholding Synd.'s No. 1 Lincoln, Sec. 30-15-32. U.R. 8-in. to T.D. 1,500 ft.
H. H. Taylor et al's No. 1 Runny, C NE SW, Sec. 1-13-19. S.D. for wtr. 700 ft.

YELL COUNTY

Tegmeir & Luckett's No. 1 Falcon, Sec. 36-7-21 ..... Sidetracking 5 3/16-in. 4,120 ft.; T.D. 4,160 ft.

EAST TEXAS

BOWIE COUNTY

Lee Timberlake's No. 1 Tidwell, 2,800 ft. N, 300 ft. W, SE cor., Jos. Eskell Sur. ..... S.D. repairs; 2,330 ft.

CAMP COUNTY

McDonald Bros.' No. 1 Tillery, 150 ft. E, 450 ft. S, NW cor. 127-ac. tract, in J. H. Murphy Sur. ..... Location.
Rogers et al's No. 1 Enfelt, R. M. Montgomery Sur..... T.A. 3,045 ft.

CASS COUNTY

Phillips Pet. Co.'s No. 1 J. R. Olds, 300 ft. N, 170 ft. E, SW cor., J. A. Stephenson Sur. ..... Rig up.

MARION COUNTY

W. D. Chew's No. 1 Fee, 2,350 ft. W, 1,275 ft. N, SE cor., W. J. Hamilton Sur..... Drlg. hard shale 2,400 ft.
P. E. Hussey's No. 1 A. A. Trammell, Chas. Lockhart Sur. ..... Drlg. shale 805 ft.

RED RIVER COUNTY

D. M. Buffington's No. 1 Hossler, E. Hughhart Sur.... S.D. 2,865 ft.
Johnson Pet. Co.'s No. 2 Randolph, Edw. Dean Sur..... Swedging 2 jts. collapsed 8-in.; arranging cmtd. 6⅝-in. and packer 2,182 ft.

SABINE PARISH

Benedum & Trees Oil Co.'s No. 1 Nona Mills Lbr. Co., Jas. Mason Sur. ..... Derrick.

SHELBY COUNTY

Chapparall Oil Co.'s No. 2 Holt, Matthew Moore Sur.... Coring hard lime 5,350 ft.

MISSISSIPPI

ADAMS COUNTY

A. C. Glassell et al's No. 1 Artonish, 75 ft. S, 75 ft. W, NE cor., Sec. 29-8n-2w ..... Began drlg. July 2; cmtd. 12½-in. 246 ft.

ALCORN COUNTY

Alcorn Pet. Co.'s No. 1 Matthews, SE cor., Sec. 14-2s-7e. Fishing 6-in. and tools 2,392 ft.; T.D. 2,735 ft.

CHICKASAW COUNTY

Hightower & Golson's No. 1 Flemming, NE cor., Sec. 20-13-3 ..... Fishing 8¼-in. csg. 1,414 ft.

HINDS COUNTY

Oscar Brown's No. 1 Riverside (formerly Hennessee et al's), SE cor. SE SW, Sec. 23-16-5 ..... Set 12½-in. 30 ft.; S.D. 1,050 ft.
Cane River Oil Co.'s No. 1 Lufkin, Sec. 15-5-1e ..... Cmtd. 6⅝-in. top chalk 2,465 ft.; T.D. 2,467 ft.
Capital O. & G. Co.'s No. 1 Brown, SW SE, Sec. 28-6-1e Drlg. 2,300 ft.
Capital O. & G. Co.'s No. 1 Clark, Sec. 10-5-1e ..... Began drlg. July 21.
Dome Oil Co.'s No. 1 Elton, NE cor. SE SW, Sec. 5-4-1e.. Drlg. 2,463 ft.
Interior Oil Co.'s No. 1 Belhaven Heights, 1,165 ft. W, 614 ft. S, NE cor., Sec. 2-5-1e ..... Derrick.
Jackson Oil Co.'s No. 1 Central Cotton Oil Co., NW cor. SW NW, Sec. 3-5-1e ..... Rig up.
Jackson O. & G. Co.'s No. 1 Capital Land & Inv. Co., Sec. 29-6-1e ..... Drlg. 2,179 ft.
Love Bros.' (was Love O. & G. Co.'s) No. 1 Bridges-Hilzim, 870 ft. N, 920 ft. W, SE cor., Sec. 35-6-1e ... S.D. 240 ft.
Love O. & G. Co.'s No. 1 Gordon, SW cor. SW NW, Sec. 8-5-1e ..... Cmtd. 6⅝-in. 2,448 ft.; drlg. plug.
Marine O. & G. Co.'s No. 1 Country Club, NW cor., Sec. 31-6-1e ..... Ratholing at 2,493 ft. in Wilcox.
Mrs. Reeder et al's No. 1 State, SE cor. NW NW, Sec. 25-6-1e ..... W.O.; T.D. 2,905 ft.
Tri-State O. & G. Co.'s No. 1 Wilson, SW cor. SE NE, Sec. 23-6-1e ..... Derrick.
J. A. Weir et al's No. 1 Holliday & Ross, NW SE, Sec. 8-6-2e ..... Drlg. 1,900 ft.

HUMPHRIES COUNTY

E. S. Steele et al's No. 1 C. B. Box, SE cor. SE NE, Sec. 25-14-4w ..... Set 12½-in. 60 ft.; S.D.

LAUDERDALE COUNTY

Lauderdale O. & G. Co.'s No. 1 Lackey, 990 ft. S and E, NW cor. NE, Sec. 2-7-16 ..... Tested S.W. 3,252 ft.; S.D. 3,420 ft.
Meridian O. & G. Co.'s No. 1 Hauser, Sec. 33-8-18 ..... S.D.; W.O.; sandy shale 2,826 ft.
J. R. Smith Oil Co.'s No. 1 C. F. Craig, Sec. 2-16-14.... Derrick.

LAFAYETTE COUNTY

Banks-Goode et al's No. 1 May, 113⅓ rds. S, 26 rds. E, NW cor. SW, Sec. 22-10-1w ..... Derrick.

LINCOLN COUNTY

Lincoln O. & G. Co.'s No. 1 Pat Case, NE cor. NE, Sec. 21-3-6 ..... S.D.; W.O. 2,231 ft.

MADISON COUNTY

Barney Kennedy et al's No. 1 Raymond, 300 ft. E, 1,800 ft. N, SW cor., Sec. 32-7-2e ..... Rig up; W.O.

MONROE COUNTY

Amory Dev. Co.'s No. 1 Bourland, Sec. 2-13-19 ..... S.D. 2,912 ft.; bailer lost in hole.
Amory Pet. Co.'s No. 1 Hall, Sec. 8-13-19 ..... Shot 2,402-18 ft.; small S.O.; arranging to shoot 2,387-95 ft.
Park Bowser et al's No. 1 Cowart, second hole, Sec. 2-12-19 ..... S.D. 30 ft.

RANKIN COUNTY

Gulf Ref. Co.'s No. 1 Rainey, NW NW, Sec. 13-5-1e ..... Cmtd. back to 2,500 ft.; drlg. plug; no gauge of volume; rock pressure 450 lbs.; old T.D. 3,607 ft.
R. A. Moore et al's No. 1 Interior Lbr. Co., Sec. 28-6-1e.. S.D. 900 ft.
Interior Oil Co.'s No. 1 Moore, 660 ft. N, 660 ft. W, SE cor. NW NW, Sec. 28-6-2e ..... S.D 900 ft.
Jackson O. & G. Co.'s No. 1 Patton, 330 ft. N, 330 ft. W, SE cor. SE NW, Sec. 17-5-1e ..... Began drlg. July 16; S.D. bldg. wtr. line.
Ohio Oil Co.'s No. 1 Payne, NW cor. SE NE, Sec. 12-5-1e ..... Location.
Pearl River O. & G. Co.'s No. 1 Marter, 990 ft. N, 200 ft. W, SE cor. SW NW, Sec. 12-5-1e ..... Estimated 10,000,000 ft. gas and flowing sulphur wtr. by heads; 6 ft. chalk; T.D. 2,478 ft.

WARREN COUNTY

El Dorado Oil Co.'s No. 1 Dornbush, Sec. 8-18-15..... S.D. 2,475 ft.; 2,350 ft. D.S. in hole; W.O.

WILKINSON COUNTY

A. C. Glassell et al's No. 1 Stowers, 31.4 chains W, 27.2 chains S, NE cor., Sec. 29-3-2w ..... Cmtd. 12½-in. 465 ft.

YALOBUSHA COUNTY

Carter Oil Co.' and J. W. Collett's No. 1 Blackmur, 330 ft. S, 990 ft. W, Sec. 14-11-4 ..... Fishing slip; T.D. 2,215 ft.

YAZOO COUNTY

Amerada Pet. Corp.'s No. 1 Doherty, SW SW, Sec. 24-12-2 ..... Drlg. sandy lime 5,133 ft.

ALABAMA

LAMAR COUNTY

Griggs & Knapp's No. 1 Wefel, Sec. 25-12-14 ..... T.A. 1,740 ft.

LAUDERDALE COUNTY

A. D. Morton et al's No. 10 O'Neal est., Sec. 8-2s-13w.... Cmtd. 12½-in. 125 ft.; drlg. hard lime 905 ft.

MARION COUNTY

Hobson et al's No. 1 John Clark, SE, Sec. 29-11-14 ..... Derrick pattern.

WASHINGTON COUNTY

S. A. Hobson's No. 1 Hobson Bros., Sec. 9-8-2 ..... S.D.; W.O.; flow at 1,460 ft.
S. A. Hobson's No. 1 Wilson, Sec. 27-7-1 ..... Fishing bailer; T.D. 881 ft.
Oscar Brown's No. 2 Land & Cotton Co., Sec. 25-3-2w.... Drlg. 700 ft.

LOUISIANA-ARKANSAS PROVEN AREAS

(Continued from Page 57)

La. G. & F. Co.'s No. 7 Thigpen & Herold, 660 ft. N, 660 ft. E, SW cor., Sec. 19-17-11 ..... Cmtd. bottom to cut off S.W. 1,027 ft.

CADDO PARISH—GREENWOOD

Calatex O. & G. Co.'s No. 1 Edgar, 1,460 ft. S, 1,900 ft. E, NW cor., Sec. 17-16-16 ..... Location.
Calatex O. & G. Co.'s No. 1 McAnn-Alfred, 1,810 ft. S, 970 ft. E, NW cor., Sec. 17-16-16 ..... Location.
Calatex O. & G. Co.'s No. 1 Hudson, 2,395 ft. N, 660 ft. E, SW cor., Sec. 8-16-16 ..... Derrick.
Calatex O. & G. Co.'s No. 2 Taylor-Trosper, 45 ft. N, 1,220 ft. E, SW cor., Sec. 8-16-16 ..... Drlg. 2,570 ft.

CADDO PARISH—MOORINGSPORT

Falcon Oil Co.'s No. 1 Miller, 1,020 ft. N, 1,320 ft. E, SW cor., Sec. 29-20-15 ..... 6-in. 1,980 ft.
The Texas Co.'s No. 5 Leonard Fee, 2,440 ft. W, 200 ft. S, NE cor., Sec. 29-20-15 ..... Set 8-in. 2,025 ft.

CADDO PARISH—OIL CITY

The Texas Co.'s No. 73 Levee Board, 1,642 ft. E, 780 ft. N, SW cor. SW SE, Sec. 27-21-16 ..... Location.

CADDO PARISH—PINE ISLAND

Shreveport Oil Corp.'s No. 6 Hicks et al, 880 ft. N, 1,360 ft. W, SE cor. NE NW, Sec. 32-21-15 ..... Cmtd. 6-in. 2,110 ft.

DE SOTO PARISH—HOLLY

Standard Oil Co.'s No. 2 Dowling Bros., 330 ft. S, 330 ft. W, NE cor. SW NE, Sec. 5-13-13 ..... Began drlg. Aug. 1; 10-in. 160 ft; T.D. 1,202 ft.

LA SALLE PARISH—URANIA

Montugu Oil Co.'s No. 8 Zenoria Lbr. Co., 710 ft. S, 250 ft. W, NE cor., Sec. 10-9-1e ..... Cmtd. 6⅝-in. 1,499 ft.; W.O.S.R.; 700 ft. oil; 700 ft. S.W.; T.D. 1,510 ft.

MOREHOUSE PARISH

Bahan & Bahan's No. 4 Feazel, 900 ft. W, 330 ft. S, NE cor., Sec. 2-20-4 ..... Location.
Grecian Bend Gas Co.'s No. 1 J. D. Sandidge et al, 660 ft. W, 1,980 ft. N, SE cor. NE, Sec. 2-20-4 ..... Location.
Industrial Gas Co.'s No. 2 Fee, 660 ft. E, 660 ft. S, NW cor. NE, Sec. 3-20-4 ..... Set 9-in. 879 ft.
La. G. & F. Co.'s No. 1 Archie, 627 ft. S, 1,957 ft. E, NW cor. SW, Sec. 22-20-4 ..... Cmtd. 6-in. 2,093 ft.
La. G. & F. Co.'s No. 26 Crossett, 645 ft. E, 574 ft. S, NW cor., Lot 9, Sec. 33-21-5 ..... Test 2,000,000 ft. gas; spraying S. W. at 2,340 ft; arranging to plug back; T.D. 2,380 ft.
Ouachita Nat. Gas Co.'s No. 6 Sandidge, 732 ft. S, 1,209 ft. W, NE cor. SE, Sec. 23-20-4 ..... Derrick.
Southern Carbon Co.'s No. 56 Fee, 660 ft. S, 660 ft. E, NW cor. NW, Sec. 15-20-4 ..... Cmtd. 6-in. 2,091 ft.

OUACHITA PARISH

Ark.-La. P. L. Co.'s No. 2 Potts, 1,560 ft. S, 1,940 ft. W, NE cor., Lot 1, NW, Sec. 30-19-4 ..... Set 6⅝-in. 2,139 ft.
Amalgamated Co.'s No. 1-B Kate Cole, 660 ft. N, 660 ft. E, SW cor. NE SW, Sec. 25-20-4 ..... Rig up.
Carbon Cons., Inc.'s No. 5 Guthrie (was United Oil & Nat. Gas Co.'s No. 5 Guthrie), 6,634 ft. N, 7,078 ft. W, cor. Secs. 49, 25 and 26, in Sec. 50-20-4 ..... Drlg. shale 1,900 ft.
Greenwood Production Co.'s No. 1 J. E. Morris, 3,923 ft. E, 660 ft. S, SW cor. NW NW, Sec. 36-19-3 ..... Begand Drlg. July 31; 12-in. 180 ft; 8-in. 872 ft.
Jordan Drlg. Co.'s No. 7 Cole, 265 ft. S, 1,459 ft. W, NE cor., Sec. 49, in Sec. 50-18-4 ..... Location.
Jordan Drlg. Co.'s No. 1 J. P. Parker, 950 ft. N, 485 ft. W, cor. Secs. 41, 9 and 16, in Sec. 41-18-4 ..... Began drlg. Aug. 2; 12-in. 162 ft.
Jordan Drlg. Co.'s No. 1 School, 216 ft. S, 244 ft. W, NE cor. NW, Sec. 16-18-4 ..... Location.
La. G. & F. Co.'s No. 4 Breard, S 9°, W 966 ft., S 81°, E 451 ft., NW cor., Sec. 43-18-4 ..... Began drlg. Aug. 3; 12½-in. 149 ft.
Pipes & Mack's No. 1 Union Gas Products Co., Inc., 1,598 ft. W, 297 ft. N, SE cor. SW, Sec. 7-18-5 ..... Tested dry 2,460 ft.; W.O. 2,500 ft.
Pipes & Mack's No. 2 Union Gas Products Co., 296 ft. W, 528 ft. N, SE cor. SW, Sec. 7-18-5 ..... Location.
United Carbon Co.'s No. 6 Spade, 1,180 ft. S, 140 ft. E, NW cor., Sec. 27-19-4 ..... Location.
United O. & N. G. Co.'s No. 2 Cole, 660 ft. S, 594 ft. E, C, Sec. 26-20-4 ..... Derrick.

RICHLAND PARISH

W. C. Feazel's No. 1 R. B. Simon, 2,406 ft. W, 2,020 ft. S, NE cor., Sec. 11-16-6 ..... Rig moved; derrick.
Franklin O. & G. Co.'s No. 1 Thompson, 660 ft. N, 165 ft. W, SE cor. NE, Sec. 14-16-6 ..... Location.
Hope Prod. Co.'s No. 1 A. H. Brown, 1,932 ft. N, 1,009 ft. W, SE cor., Sec. 22-16-6 ..... Cmtd. 6-in. 2,285 ft.
Hope Prod. Co.'s No. 1 J. E. Duff, 660 ft. N, 1,980 ft. W, SE cor., Sec. 15-16-6 ..... Rig up.
International Gas Prod. Co.'s No. 1 Minnie LaGrone, 769 ft. N, 858 ft. E, SW cor., Sec. 7-16-7 ..... Location.
La. Gas & Fuel Co.'s No. 1 Etheridge, 1,412 ft. S, 770 ft. E, NW cor. NE, Sec. 28-17-6 ..... Location.
Northern La. Nat. Gas Co.'s No. 2 J. H. Hemler, 660 ft. S, 1,995 ft. W, NE cor., Sec. 11-16-6 ..... Set 6-in. 2,300 ft.
Northern La. Nat. Gas Co.'s No. 2 L. R. Hemler, 1,990 ft. E, 663 ft. N, SW cor. NW, Sec. 23-16-6 ..... Drlg. 1,957 ft.
Northern La. Nat. Gas Co.'s No. 5-B McCoy, 1,650 ft. S, 660 ft. W, NE cor., Sec. 17-16-6 ..... Location.
Northern La. Nat. Gas Co.'s No. 1 McKay, 681 ft. W, 559 ft. N, SE cor. SW, Sec. 22-16-6 ..... Derrick.
Palmer Corp.'s No. 1-B Boykin, 177 ft. S, 787 ft. E, C, Sec. 33-17-6 ..... Derrick.
Palmer Corp.'s No. 1 Brown, 1,320 ft. S, 659 ft. W, NE cor. NW NE, Sec. 27-16-6 ..... Drlg. shale 2,358 ft.
Palmer Corp.'s No. 1 Hill, 1,320 ft. S, 660 ft. E, NW cor. SW, Sec. 31-16-6 ..... Began drlg. Aug. 3; 12½-in. 173 ft.
Richland Prod. Co.'s No. 1 Hale, 660 ft. S, 660 ft. E, NW cor. NE, Sec. 23-16-16 ..... 6-in. 2,300 ft.
Southern Carbon Co.'s No. 1-B Hallock, 1,622 ft. N, 990 ft. W, SE cor. NW, Sec. 1-16-6 ..... Began drlg. June 12; cmtd. 12-in. 185 ft., 8-in. 865 ft.
Southern Carbon Co.'s No. 1-B Hemler, 660 ft. N, 1,435 ft. E, SW cor., Sec. 1-16-6 ..... Began drlg. July 23; cmtd. 12-in. 185 ft; 8-in. 902 ft.
Southern Carbon Co.'s No. 2-C M. L. McCoy, 1,880 ft. N, 5,024 ft. E, SW cor., Sec. 1-16-6 ..... Location.
Southern Carbon Co.'s No. 5 F. B. and E. A. Sartor, 1,156 ft. E, 531 ft. S, NW cor. SW, Sec. 19-16-6 ..... Cmtd. 6-in. 2,300 ft; drlg. 390 ft.
Southern Carbon Co.'s No. 6 F. B. and E. A. Sartor, 2,640 ft. N, 2,031 ft. W, SE cor., Sec. 24-16-5..... Location.
Southern Carbon Co.'s No. 1-C T. R. Sartor, 660 ft. S, 660 ft. W, NE cor., Sec. 29-16-6 ..... S.D. 2,430 ft.
Southern Carbon Co.'s No. 1 H. L. Thomason, 1,980 ft. S, 665 ft. E, NW cor., Sec. 11-16-6 ..... Drlg. 2,145 ft.
Southern Carbon Co.'s No. 1-B Thomason et al, 2,310 ft. W, 100 ft. S, NE cor., Sec. 23-16-6 ..... Cmtd. 9-in. 876 ft.
Southern Carbon Co.'s No. 1-C Thomason, 1,980 ft. N, 1,400 ft. W, SE cor., Sec. 14-16-6 ..... Location.
Southern Carbon Co.'s No. 1-D Thomason, 1,320 ft. S, 660 ft. W, NE cor., Sec. 34-16-6 ..... Began drlg. Aug. 3; set 12-in. at 185 ft.
United Carbon Co.'s No. 1 Boise, 1,320 ft. W, 660 ft. N, SE cor., Sec. 28-16-6 ..... Set 8-in. 850 ft.
United Carbon Co.'s No. 1-A J. M. Thomason, 2,032 ft. N, 3,338 ft. W, SE cor., Sec. 22-16-6 ..... Set 8-in. 865 ft.

SABINE PARISH—PLEASANT HILL

Ark. Fuel Oil Co.'s No. 14 Logan, 1,035 ft. N, 241 ft. W, C, Sec. 33-10-12 ..... Swbng. to test broken sand 3,230 ft.

F. A. Bartlett, Jr.'s No. 1 Logan, 200 ft. S, 200 ft. E, NW cor., Sec. 27-10-12 ..... Began drlg. July 13; cmtd. 12-in. 110 ft.

J. M. Bridges, trustee's No. 1 Cook Land Co., Sec. 34-10-12 ..... Blowing with D.S. in hole; estimated 25,000,000 ft. gas; trying to kill; T.D. 3,191 ft.

A. C. Glassell's No. 1 Logan Oil Co., 300 ft. E, C, Sec. 23-10-13 ..... Began drlg. July 31; set 10-in. 63 ft; T.D. 502 ft.

SABINE PARISH—ZWOLLE

Central Pet. Co.'s No. 1 Baptist Church (was No. 1 Wall), Zwolle Townsite in Sec. 31-8-12 ..... Bailed dry; W.O. 2,590 ft.

Tom Davis' (was T. D. Allison's) No. 1 Holliday, Sec. 31-8-12, Zwolle Townsite ..... S.D. wtr. 1,350 ft.

Glassell & Merren's No. 1 Thomas, Lot 13, Blk. 3, Zwolle Townsite, Sec. 31-8-12 ..... Oil show; S.D. 2,600 ft.

F. M. Hood's No. 1-B (was No. 2) Winston, 700 ft. E, 425 ft. S, NW cor., Sec. 31-8-12, Zwolle Townsite ..... S.D. 1,065 ft.

Ab Jones et al's No. 1 Ferguson, 330 ft. N, 330 ft. W, SE cor. NE SW, Sec. 33-8-12 ..... Rig up.

Loring Oil Co.'s (formerly Benedum & Trees Oil Co.'s) No. 4 Bowman-Hicks, 330 ft. N, 330 ft. W, C, Sec. 34-8-12 ..... T.A. 2,669 ft.

Loring Oil Co.'s (formerly Benedum & Trees Oil Co.'s) No. 5 Bowman-Hicks, 900 ft. S, 1,400 ft. W, C, Sec. 34-8-12 ..... T.A. sandy lime 4,176 ft.

Loring Oil Co.'s No. 8 Bowman-Hicks, 330 ft. S, 330 ft. E, NW cor. SW SE, Sec. 33-8-12 ..... Shot with 270 qts., cleaning out; T.D. 2,700 ft.

Loring Oil Co.'s No. 10 Bowman-Hicks, 330 ft. N, 330 ft. E, SW cor, NE SE, Sec. 33-8-12 ..... S.D. 2,664 ft.

Loring Oil Co.'s No. 11 Bowman-Hicks, Sec. 34-8-12 ..... Cmtd. 6⅝-in. 3,330 ft.; T.D. 3,382 ft.

Loring Oil Co.'s No. 2 Sabine Lbr. Co., 1,430 ft. E, 340 ft. N, C, Sec. 34-8-12 ..... Began drlg. Aug. 1; 10-in. 112 ft; drlg. 520 ft.

Loring Oil Co.'s No. 1 Schuffert, 330 ft. S, 330 ft. W, NE cor. NE SE, Sec. 27-8-12 ..... Rig up.

Loring Oil Co.'s No. 1 Schull, 330 ft. S, 330 ft. E, NW cor. SW, Sec. 26-8-12 ..... T.A. 2,600 ft.

Ohio Oil Co.'s No. 5 Bowman-Hicks, 330 ft. N, 330 ft. E, SW cor., Sec. 33-8-12 ..... Coring chalk rock 2,615 ft.

Olson Bros.' No. 2 Boone-Ferguson, 330 ft. N, 330 ft. W, SE cor. NW SE, Sec. 33-8-12 ..... D.S. test 2,467 ft.; S.W.; cmtd. to 2,430 ft.

W. D. Perritt et al's No. 1 Elliott, 150 ft. N, 150 ft. E, SW cor. SW SE SW, Sec. 30-8-12 ..... Arranging to set 6-in. 2,214 ft.

Philp Bros.' No. 1 Dow, Lot 1, Blk. 18, Zwolle Townsite, Sec. 31-8-12 ..... Bailed dry 2,300 ft.; S.D.

Posey et al's No. 1 Peterson, Blk. 16, Zwolle Townsite, Sec. 31-8-12 ..... S.D. 250 ft.

A. H. Tarver's No. 3 Sabine State Bank, 330 ft. N, 330 ft. W, SE cor. SW NW, Sec. 26-8-12 ..... Cmtd. 6-in. 2,325 ft.; T.D. 2,377 ft.

Wheatcroft et al's No. 1 Sabine Lbr. Co., SW NE, Sec. 31-8-12 ..... S.D. 2,450 ft.

SABINE PARISH—BLUE LAKE

R. L. Gay's No. 8 Bowman-Hicks, Sec. 18-7-13 ..... Bailing to test 2,552 ft.

R. L. Gay, trustee's No. 5 Sabine Lbr. Co., 330 ft. S, 330 ft. W, NE cor. SE NE, Sec. 15-7-14 ..... Began drlg. Aug. 4; drlg. 50 ft.

UNION PARISH

Greenwood Production Co.'s No. 3 Norsworthy, 1,320 ft. S, 663 ft. E, NW cor., Sec. 9-21-3 ..... Cmtd. 6-in. 2,045 ft.; T.D. 2,205 ft.

Industrial Gas Co.'s No. 6 Grayling Lbr. Co., 660 ft. E, 665 ft. N, SW cor. NW, Sec. 33-21-4 ..... Derrick.

Interstate Nat. Gas Co.'s No. 1 J. M. Edwards, 1,980 ft. W, 660 ft. S, NE cor., Sec. 11-21-3 ..... Rig up.

Nemours Corp.'s No. 2 Hollis, 817 ft. S, 995 ft. W, NE cor. NW, Sec. 11-20-3 ..... Location.

Stovall Drlg. Co.'s No. 1 Murray, 1,650 ft. N, 330 ft. W, SE cor. SW, Sec. 32-23-4 ..... Rig up.

WEBSTER PARISH—SAREPTA AND SHONGALOO

Ideal O. & G. Co.'s No. 1 Coyle, 300 ft. N, 300 ft. E, SW cor. SW SE, Sec. 24-23-11 ..... Derrick.

H. M. Jones Drlg. Co.'s (was E. W. Bateman's) No. 2 Cook, 200 ft. S, 200 ft. W, NE cor. SE NW, Sec. 2-22-11 ..... 4 ft. sand 2,723-27 ft.; bldg. new derrick.

H. M. Jones Drlg. Co.'s No. 1 Womble, 860 ft. S, 200 ft. E, NW cor. SW, Sec. 1-22-11 ..... Derrick.

K. C. Supply Co.'s No. 1 Cochrane, 330 ft. N, 330 ft. W, SE cor. E½ NW, Sec. 36-23-11 ..... Plugged back to 2,713 ft.; T.D. 2,726 ft.

Liggett et al's No. 1 Slack, 720 ft. E, 150 ft. N, SW cor. SE, Sec. 36-23-11 ..... Cmtd. 6-in. 2,732 ft.

Liggett et al's No. 2 Slack, 720 ft. E, 150 ft. N, SW cor. SE SE, Sec. 36-23-11 ..... Began drlg. Aug. 4; 10-in. 168 ft; T.D. 1,260 ft.

Magnolia Pet. Co.'s No. 2 Sally Coyle, 150 ft. N, 150 ft. W, SE cor. SE NE, Sec. 2-22-11 ..... Began drlg. Aug. 3; 15½-in. at 291 ft.

Magnolia Pet. Co.'s No. 4 Scroggins, 150 ft. N, 150 ft. E, SW cor. SW NW, Sec. 1-22-11 ..... W.O.S.R. 8 ft. sand; T.D. 2,717 ft.

Merrick Oil Corp.'s No. 3 Slack, 330 ft. N, 330 ft. W, SE cor. SW SE, Sec. 36-23-11 ..... Derrick.

Sarepta Oil Co.'s No. 3 Gardner, 396 ft. N, 78 ft. E, SW cor. NW NW, Sec. 6-22-10 ..... Derrick.

S. H. Riggs, trustee's No. 1 L. & A., 250 ft. S, 530 ft. E, NW cor. NW NE, Sec. 1-22-11 ..... S.D. 2,100 ft.

S. H. Riggs, trustee's No. 2 L. & A., 255 ft. S, 600 ft. W, NE cor. SW NE, Sec. 36-23-11 ..... Derrick.

S. H. Riggs, trustee's No. 3 L. & A., 255 ft. N, 600 ft. W, SE cor. NW NE, Sec. 36-23-11 ..... Location.

S. H. Riggs, trustee's No. 4 L. & A., 255 ft. S, 600 ft. W, NE cor. NW SE, Sec. 36-23-11 ..... Location.

W. O. Neely's No. 1 J. R. Slack, 150 ft. N, 150 ft. E, SW cor., Sec. 12-22-11 ..... Location.

Sarepta Oil Co.'s No. 2 Gardner, NE SW, Sec. 1-22-11 .. Rig up.

Sarepta Oil Co.'s No. 1 Slack, SW cor. NW NE, Sec. 36-23-11 ..... Rig up.

Southern Production Co.'s (was Wingfield et al's) No. 2 Slack, 163 ft. S, 140 ft. E, NW cor. NE, Sec. 1-22-11 .. W.O.S.R. 6 ft. broken sand; T.D. 2,734 ft.

Southern Production Co.'s No. 4 Slack, 600 ft. N, 600 ft. W, SE cor. NW NE, Sec. 1-22-11 ..... Location.

ARKANSAS

JOHNSON COUNTY

Ark.-La. P. L. Co.'s No. 1 Cline, 660 ft. S, 660 ft. W, NE cor. NE SE, Sec. 16-10-24 ..... Fishing tools 2,850 ft.

Conn Grable's No. 1 Hoeing, 720 ft. N, 590 ft. W, SE cor., Sec. 20-9-25 ..... S.D. 2,070 ft.; C.D.

NEVADA COUNTY

C. F. Steele's No. 1 E. W. Groves, Sec. 21-14-20 ..... S.D. 2,810 ft.

OUACHITA COUNTY—SMACKOVER

L. H. Hamilton's No. 3 Doyle, 100 ft. E, 400 ft. N, SW cor. SE SE, Sec. 23-15-16 ..... Derrick.

Standard Oil Co.'s No. 7 Farris, 200 ft. S, 200 ft. W, NE cor. NW NW, Sec. 34-15-15 ..... Drlg. 1,640 ft.

Wilson & Chapman's No. 1-B Arnold, 330 ft. N, 330 ft. E, SW cor. SE SW, Sec. 24-16-15 ..... Rig. up.

UNION COUNTY—CHAMPAGNOLLE

Magnolia Pet. Co.'s No. 1 Gregory, Sec. 15-17-14 ..... D.S. test 2,859-64 ft.; 14 jts. oil; cmtd. 5⅝-in. 2,859 ft.; T.D. 2,864 ft.

Ohio Oil Co.'s No. 10 Crain, 330 ft. S, 330 ft. W, NE cor. SE SW, Sec. 1-17-14 ..... Location.

Ohio Oil Co.'s No. 2 R. Pumphrey, 330 ft. N, 330 ft. E, SW cor. NE, Sec. 12-17-14 ..... Derrick.

Ohio Oil Co.'s No. 4 R. Pumphrey, 330 ft. S, 330 ft. W, NE cor. NE NW, Sec. 12-17-14 ..... Location.

Sundby et al's No. 2 Perdue, 75 ft. S, 150 ft. E, NW cor., Sec. 32-16-14 ..... S.D. 3,205 ft.

UNION COUNTY—EL DORADO

H. L. Hunt's No. 6 Pratt, 150 ft. N, 330 ft. E, SW cor. NE NE, Sec. 7-18-15 ..... S.W. 2,214 ft.

Malloy & Co.'s No. 1 Murphy, Sec. 1-18-16 ..... Rig up; W.O.

Malloy & Co.'s No. 3 Robertson, NE cor. S½ SW NE, Sec. 6-18-15 ..... Location.

EAST TEXAS

HARRISON COUNTY

Calatex O. & G. Co.'s No. 6 Agurs, 755 ft. N, 699 ft. W, Mile Post 27, in J. Womack Sur. ..... Location.

Shell Rock Pet. Co.'s No. 1 Oliver Dougherty, W. D. Burris Sur. ..... Fishing; T.D. 3,445 ft.

PANOLA COUNTY

Ark-La. P. L. Co.'s No. 2-A G. W. Brumble, 477 ft. W, 473 ft. S, NW cor., Jno. Womack Sur., in B. C. Jordan Sur. ..... Drlg. broken lime 3,918 ft.

S. E. Bell et al's No. 1 Burnett Lbr. Co., center S. B. Hendricks Sur. ..... Location.

Jackson et al's No. 1 Dunham, 150 ft. W, 150 ft. N, SE cor., M. I. Dunham 29 ac., in Chas. Haley Sur. ..... S.D. 2,005 ft.

Nat. Gas Products Co.'s No. 3 Tom Moore, 889 ft. E, 7,928 ft. S, NW cor., B. C. Jordan Sur. ..... Drlg. 3,500 ft.

The Texas Co.'s No. 10 G. W. Brumble, SE cor., E. F. Mitcheson Sur. ..... Began drlg. July 17; cmtd. 10-in. 35 ft.; drlg. 1,450 ft.

The Texas Co.'s No. 11 G. W. Brumble, 2,814 ft. N, 700 ft. W, SE cor., E. F. Mitcheson Sur. ..... Location.

Doris Thomason's No. 15 Crenshaw, 1,992 ft. S, 2,305 ft. E, SW cor., Jno. Womack Sur., in B. C. Jordan Sur. ..... Derrick.

Warren & Davis' No. 1 McNuse, 1,671 ft. S, 1,329 ft. E, NW cor., Abe Brooker Sur. ..... Derrick.

GULF COAST FIELDS AND WILDCATS

(Continued from Page 56)

RACCOON BEND—AUSTIN COUNTY

Humble Oil & Ref. Co.'s No. 9 Thompson ..... Rig.
Humble Oil & Ref. Co.'s No. 10 Thompson ..... Drlg. shale and lime 1,720 ft.
Humble Oil & Ref. Co.'s No. 1 Fitz Lamp ..... Rig.
Humble & Valley's No. 3 Buchanan ..... Derrick.
Humble & Valley's No. 2-B Hardy ..... Flowed short times 150 bbls. daily; to pump 3,202 ft.
Humble & Valley's No. 7 Payne ..... Derrick.
Humble & Valley's No. 8 Payne ..... Derrick.
Humble & Valley's No. 2 Sherrod ..... Comp. flowing 385 bbls. 3,157 ft.
Humble & Valley's No. 6 Woodley ..... Derrick.
Humble & Valley's No. 7 Woodley ..... Derrick.
Humble & Valley's No. 8 Woodley ..... Derrick.
Humble & Valley's No. 9 Woodley ..... Derrick.

DE WALT—FORT BEND COUNTY

Humble Oil & Ref. Co.'s No. 6 Camp ..... Drlg. hard lime 1,991 ft.

HUMBLE—HARRIS COUNTY

John Deering's No. 1 Graf ..... No report.
LaRue, trustee's No. 1 Crane, northwest ..... Derrick.
Rio Bravo Oil Co.'s No. 3 fee, west ..... Comp. flowing 1,800 bbls. 4,120 ft.
Rio Bravo Oil Co.'s No. 4 fee, southwest ..... Drlg. plug 3,890 ft.
Rio Bravo Oil Co.'s No. 5 fee, west ..... Rig.
Rio Bravo Oil Co.'s No. 6 fee, west ..... Location.
R o Bravo Oil Co.'s No. 1 H.&W.T., west ..... Drlg. sandy shale 4,097 ft.
South Texas Pet. Co.'s No. 15 Morris, south ..... Cemented 6⅝-inch casing 4,968 ft.
Sun Oil Co.'s No. 9 Bender, west ..... No report.
Sun Oil Co.'s No. 10 Bender, west ..... Oil sand 4,425 ft.; cem. 7-in. casing 4,325 ft.
Sun Oil Co.'s No. 11 Bender, west ..... No report.
Sun Oil Co.'s No. 12 Bender, west ..... Drlg. shale and lime 3,841 ft.
Sun Oil Co.'s No. 49 River, north ..... Rig.
Trapshooter Riley's No. 1 Long John Jones ..... No report.
The Texas Company's No. 2 Atlantic & Gulf, east ..... Rig.
The Texas Company's No. 1 fee ..... Cem. 6⅝-in. casing 3,847 ft.
The Texas Company's No. 43 Stevenson, east ..... Location.
The Texas Company's No. 23 Wheeler and Pickens, northeast ..... Drlg. sticky shale 5,255 ft.
West Production Co.'s No. 3 Foster, north ..... Drilling.

BLUE RIDGE—FORT BEND COUNTY

Gulf Production Co.'s No. 18 Luscher, south ..... Drlg. shale 3,570 ft.

PIERCE JUNCTION—HARRIS COUNTY

Gulf Production Co.'s No. 1 Manchester Corp. ..... Drlg. gumbo 1,902 ft.
Rio Bravo Oil Co.'s No. 14-A Settegast ..... Rigging up to work over.
Rio Bravo Oil Co.'s No. 19-A Settegast ..... Comp. flowing 6,200 bbls. daily on half-inch choke 4,226 ft.
Rio Bravo Oil Co.'s No. 20-A Settegast ..... Rig.

LIBERTY—LIBERTY COUNTY

Empire Gas & Fuel Co.'s No. 13 O'Brien ..... Oil sand 3,583 ft.; cem. casing.
The Texas Company's No. 7 Green, northwest ..... Drlg. hard sand and shale 4,174 ft.

BIG CREEK—FORT BEND COUNTY

Gulf Prod. Co.'s No. 59 Davis ..... Sandy shale showing oil 2,331-3,468 ft.

LOST LAKE—CHAMBERS COUNTY

Pure Oil Co.'s No. 5 Lost Lake ..... Drlg. sandy shale and lime 3,194 ft.

NASH—BRAZORIA COUNTY

Rycade Oil Corp.'s No. 27 Wisdom ..... Drlg. shale 4,112 ft.

SOUR LAKE—HARDIN COUNTY

The Texas Company's No. 306 Texas Co. fee ..... Cem. 6⅝-in. casing 2,100-43 ft.; pumping.

SARATOGA—HARDIN COUNTY

Rio Bravo Oil Co.'s No. 88-A Cotton ..... Comp. flowing 57 bbls. 550 ft.
Rio Bravo Oil Co.'s No. 95-A Cotton ..... Drlg. gumbo and lime 240 ft.

GOOSE CREEK—HARRIS COUNTY

Humble Oil & Ref. Co.'s No. 78 Simms-Smith ..... Drlg. shale 3,899 ft.

SPINDLETOP—JEFFERSON COUNTY

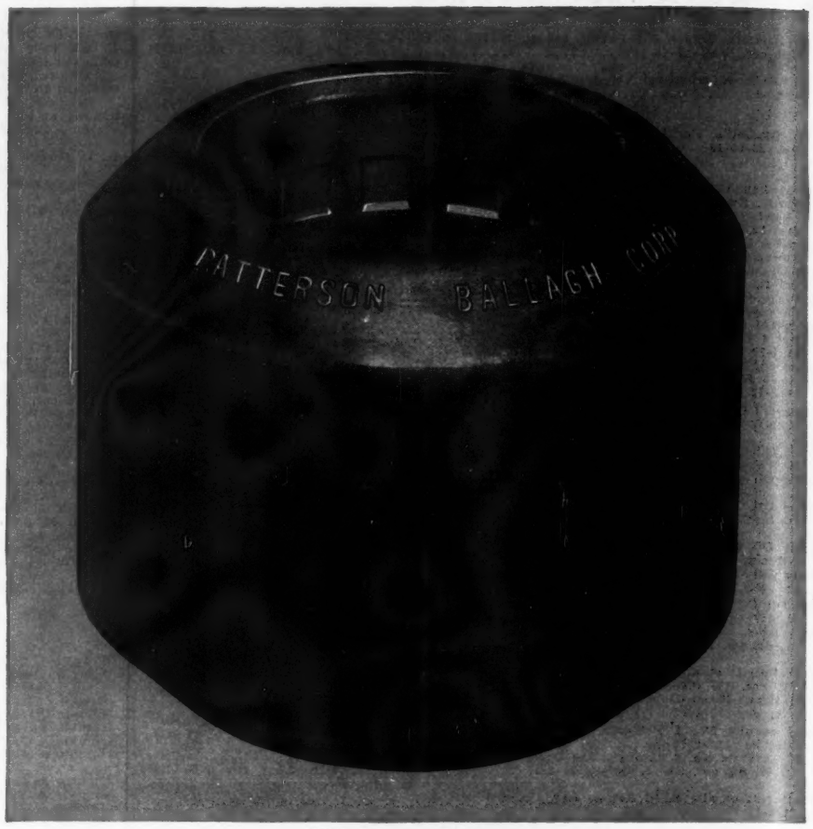
Yount Lee Oil Co.'s No. 19 McFaddin (workover) ..... Oil sand 3,429 ft.; to test.
Yount Lee Oil Co.'s No. 123 McFaddin ..... No report.
Yount Lee Oil Co.'s No. 138 McFaddin ..... Drlg. shale 5,672 ft.
Yount Lee Oil Co.'s No. 139 McFaddin ..... Drlg. sand and shale 4,821 ft.
Yount Lee Oil Co.'s No. 140 McFaddin ..... Drlg. shale and lime 3,936 ft.

NORTH DAYTON—LIBERTY COUNTY

Victor Oil Co.'s (V. H. Borsodi) No. 2 Gulf ..... Total depth 4,768 ft.; sidetracking 3,842 ft.
Houtex Oil Co.'s No. 1 Davis, north ..... Drlg. gumbo and lime 3,256 ft.
Houtex Oil Co.'s No. 2 Wilhite ..... Cap rock 5,167-5,228 ft.; abandoned.
Harrison Oil Co.'s No. 5 Quintette ..... Abandoned location.
Harrison Oil Co.'s No. 1 Gulf fee ..... Rig.

HIGH ISLAND—GALVESTON COUNTY

Gulf Production Co.'s No. 10 Smith ..... Total depth 4,439 ft.; reaming.
Marrs McLean's No. 18 Cade ..... Total depth 4,177 ft.; side tracking 2,251 ft.
Marrs McLean's No. 19 Cade ..... Derrick.



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ORCHARD—FORT BEND COUNTY

Gulf Production Co.'s No. 23 Moore ..... Sandy shale showing oil 4,088-95 ft.; total depth 4,098 ft.
Gulf Production Co.'s No. 24 Moore ..... Drlg. sticky shale 3,970 ft.

HULL—LIBERTY COUNTY

The Texas Company's No. 2 Barrow ..... Drlg. sand and shale 3,586 ft.

PORT NECHES—ORANGE COUNTY

Gulf Production Co.'s No. 1 W. H. Starks ..... Drlg. sand rock 5,272 ft.
The Texas Company's No. 2 Kuher ..... Set 12 ft. 4¾-in. screen 4,412 ft.; comp. flowing 30 bbls. per hour.
The Texas Company's No. 2 Stark ..... Set 23 ft. 3-in. strainer 4,598 ft.; swabbing oil and water.

CLAY CREEK—WASHINGTON COUNTY

Sun Oil Co.'s No. 5 Hunt ..... Rig.
Sun Oil Co.'s No. 4 Janner ..... Drlg. hard shale 2,273 ft.
Sun Oil Co.'s No. 3 Witt ..... Comp. swabbing 300 bbls. daily, sand 983-1,236 ft.

ESPERSON—LIBERTY COUNTY

Cranfill-Reynolds Oil Co.'s No. 5 Davis ..... Rig.
Cranfill-Reynolds Oil Co.'s No. 14 Esperson ..... Hard sand 3,255 ft.; waiting on cement to set.
Cranfill-Reynolds Oil Co.'s No. 15 Esperson ..... Drlg. gumbo 5,298 ft.
Cranfill-Reynolds Oil Co.'s No. 16 Esperson ..... Waiting on rig.
Cranfill-Reynolds Oil Co.'s No. 4 Moores Bluff ..... Rig.
Cranfill-Reynolds Oil Co.'s No. 1-B Moores Bluff ..... Temporarily abandoned in shale 4,703 ft.
Yount Lee Oil Co.'s No. 3 Moores Bluff ..... Drlg. hard sandy shale 7,309 ft.

HANKAMER—LIBERTY COUNTY

Gulf Production Co.'s No. 1 Ezzell ..... Drlg. shale 3,173 ft.

WEST COLUMBIA—BRAZORIA COUNTY

Anderson et al's No. 1 Smith & Brooks ..... No report.

ORANGE—ORANGE COUNTY

Sun Oil Co.'s No. 7 Gunstream ..... No report.

BOLING—WHARTON COUNTY

C. S. Thomas' No. 1 Volney ..... Shut down 235 ft.
C. S. Thomas' No. 1 Taylor ..... Drlg. gumbo 1,264 ft.

REFUGIO—REFUGIO COUNTY

Houston Oil Co.'s No. 3 Ryals ..... Reset screen 3,657 ft.
Houston Oil Co.'s No. 1 Rooke ..... Drlg. hard broken lime 1,225 ft.
Houston Oil Co.'s No. 1 Strauch, Block 20 ..... Abandoned 5,468 ft.
Houston Oil Co.'s No. 1 City, Block 59 ..... Drlg. sticky shale 4,467 ft.
Houston Oil Co.'s No. 1 O'Connor ..... Drlg. sticky shale and lime 2,680 ft.
Houston Oil Co.'s No. 1 West ..... Drlg. sandy shale 5,719 ft.
Houston Oil Co.'s No. 1 Rose Lambert ..... Set screen 5,901 ft.
Houston Oil Co.'s No. 2 Rose Lambert ..... Cored salt water sand 5,727 ft.
Houston Oil Co.'s No. 7 Fannie Heard (workover) ..... Total depth 3,718 ft.; plugged to 3,680 ft.
Houston Oil Co.'s No. 1 Johnson, Block 63 ..... Sand and shale 4,330 ft.; shut down for repairs.
Independent Oil & Gas Co.'s No. 1 Rose Lambert ..... Drlg. sand and lime 1,143 ft.
Independent Oil & Gas Co.'s No. 6 Jerry Reilly (workover) ..... Oil sand 6,447-58 ft.; cem. 6⅝-in. casing.
Edwin M. Jones' No. 3-A J. F. B. Heard ..... Oil sand 3,638-49 ft.; set 10-ft. screen.
Luling Oil & Gas Co.'s No. 1 J. W. Kay ..... Total depth 3,758 ft.; set 12-ft. screen.
Luling Oil & Gas Co.'s No. 1 West ..... Drlg. gumbo 1,170 ft.; cem. 12½-in. casing.
Mission Drilling Co.'s No. 1 Moss-Heard, Blk. 11 ..... Drlg. shale 3,125 ft.
Mission Drilling Co.'s No. 1 O'Brien (workover) ..... Preparing to deepen.
Mission Drilling Co.'s No. 1 Joe Shay, Block 6 ..... Oil sand 5,462-69 ft.; pulling screen.
Moody-Seagraves Prod. Co.'s No. 1-A O'Brien ..... Derrick.
Moody-Seagraves Prod. Co.'s No. 3 O'Brien ..... Derrick.
Moody-Seagraves Prod. Co.'s No. 1 Strauch, Block 64 ..... Set 15-ft. screen 5,629 ft.
Moody-Seagraves Prod. Co.'s No. 1-A St. John ..... Sticky shale 1,455 ft.; temporarily shut down.
Morgan Oil Corp.'s No. 2 O'Connor ..... Drlg. shale 6,132 ft.
Pearson Properties, Inc.'s No. 1 Hornburg ..... Rig.
Pearson Properties, Inc.'s No. 3 Ryals ..... Drlg. hard shale 2,152 ft.
Pearson Properties, Inc's No. 1 Tobe Wood ..... Abandoned 5,503 ft.
Ed Price's No. 1 Mission River ..... To pump 3,663 ft.
Saxet Oil Co.'s No. 12 Clint Heard ..... Drlg. sticky shale and lime 5,739 ft.
Saxet Oil Co.'s No. 1 Kay ..... Drlg. sticky shale 5,009 ft.
Saxet Oil Co.'s No. 2 Ryals (workover) ..... Drlg. broken sandy lime 6,100 ft.
Saxet Oil Co.'s No. 3 Ryals ..... Drlg. hard gumbo 4,171 ft.
L. L. Smith's No. 1 Sumner ..... Set screen 5,464 ft.
The Texas Company's No. 2 Ben Shelton ..... Drlg. plug 5,457 ft.
C. A. Tucker's No. 1 Empson ..... Drlg. sticky shale 1,100 ft.
Union Producing Co.'s No. 5 O'Brien ..... Swabbing 5,432 ft.
Union Producing Co.'s No. 6 O'Brien ..... Derrick.
Union Producing Co.'s No. 5 Powers ..... Location.
Union Producing Co.'s No. 5 Mitchell ..... Rig.
Union Producing Co.'s No. 2 Eskridge-Heard ..... Cem. 6⅝-in. casing 3,684 ft.

SOUTH LOUISIANA FIELDS
LOCKPORT—CALCASIEU PARISH

Union Sulphur Co.'s No. 2 Moss ..... Tested salt water 5,055 ft.
Union Sulphur Co.'s No. 1 Martha Moss ..... Drlg. water sand 4,487 ft.
Vacuum Oil Co. and Gulf Ref. Co.'s No. 28 Miller ..... Drlg. hard sand 4,066 ft.
Vacuum Oil Co. and Gulf Ref. Co.'s No. 29 Miller ..... Rig.
Vacuum Oil Co. and Gulf Ref. Co.'s No. 5 Freiberg & Wolf ..... Drlg. sticky shale 5,585 ft.
Vacuum Oil Co.'s No. 6 Bayou State ..... Rig.
Yount Lee Oil Co.'s No. 1 Miller ..... Drlg. sand 5,756 ft.

HACKBERRY—CAMERON PARISH

F. A. Book's No. 1 Hanzen ..... Abandoned in heaving shale 3,480 ft.
Calcasieu Oil Co.'s No. 19 Watkins ..... No report.
Calcasieu Oil Co.'s No. 3 Isaac Dorisu ..... Comp. flowing 2,800 bbls. daily 3,899 ft.
Duhon Oil & Mineral Co.'s No. 1 Koonce ..... No report.
Federal Petroleum Co.'s No. 1 Hebert ..... No report.
Moon Oil Co.'s No. 5 Sonner ..... Comp. pumping 75 bbls. fluid, 12 per cent water, 3,126 ft.
The Texas Company's No. 7 State ..... Drlg. hard lime and shale 2,050 ft.
Yount Lee Oil Co.'s No. 31 State ..... No report.

JENNINGS—ACADIA PARISH

Eunice Oil Co.'s No. 2 Crowley, west ..... Set 15 ft. screen 4,146 ft.
The Texas Company's No. 5 Rayne heirs, King tract ..... Drlg rock 8,605 ft.
Yount Lee Oil Co.'s No. 9 Housierre Latrielle ..... Drlg. 5,000 ft.
Yount Lee Oil Co.'s No. 7 Crowley ..... Derrick.

VINTON—CALCASIEU PARISH

Gulf Refining Co.'s No. 4 Gardner ..... Drlg. gumbo 1,396 ft.
Supreme Oil Co.'s No. 2 Gray ..... Rig.
Vinton Petroleum Co.'s No. 5 Gray (workover) ..... Drlg. 3,279 ft.
Vinton Petroleum Co.'s No. 9 Gray ..... Drlg. 2,167 ft.
Wilson-Broach's No. 4 Wilson ..... Drlg. 917 ft.
Vinton Petroleum Co.'s No. 8 Gray ..... Drlg. sand and lime 3,284 ft.

BAYOU BOUILLON—ST. MARTIN PARISH

Rycade Oil Corp.'s No. 1 Woodyard Lake ..... No report.

STARKS—CALCASIEU PARISH

Adams Oil Co.'s No. 1 Roderick ..... No report.
J. O. Davis' No. 1 Industrial ..... Standing 3,775 ft.
Gulf Refining Co.'s No. 24 Starks ..... Drlg. 889 ft.

SWEET LAKE—CAMERON PARISH

Magnolia Petroleum Co.'s No. 1 Sweet Lake ..... Drlg. shale 4,800 ft.
Pure Oil Co.'s No. 9 Yount Lee ..... Comp. flowing 1,350 bbls. pipe line oil at 6,813 ft.

ANSE LA BUTTE—ST. MARTIN PARISH

Yount Lee Oil Co.'s No. 2 Herbert ..... No report.

PORT BARRE—ST. LANDRY PARISH

Pure Oil Co.'s No. 1 Perkins ..... Total depth 3,594 ft.; shut down for repairs.

MISCELLANEOUS WILDCATS
TEXAS
AUSTIN COUNTY

O'Hara et al's No. 1 Batla, near Raccoon City ..... Shut down 4,000 ft.

BRAZORIA COUNTY

The Texas Company's No. 1 Ewin, Harvey Little Sur. ..... Drlg. sticky shale 6,360 ft.; reaming.
Mills Bennett Production Co.'s No. 1 Random, Allen ..... Total depth 5,363 ft.; standing.
Mills Bennett Production Co.'s No. 1 Reese, Allen ..... Drlg. hard sand and lime 2,751 ft.
Mills Bennett Prod. Co.'s No. 1 Poole, Allen ..... Drlg. cap rock 1,620 ft.
Mills Bennett Production Co.'s No. 2 Allen ..... Rig.
Faust et al's No. 5 Faust ..... Drlg. sandy shale 4,760 ft.
Freeport Sulphur Co.'s No. 2,001 Fee, Bryan Heights ..... Drlg. sand 2,165 ft.
Rucks & Patterson's No. 1 Hunter, southwest of Hoskins ..... Total depth 1,180 ft.; sidetracked to rock 968 ft.; shut down.
Rycade Oil Corp.'s No. 1 Rapid City, Henry Austin Sur. ..... Drlg. shale 6,273 ft.
Rycade Oil Corp.'s No. 1 Seaburn, Stratton Ridge ..... Cemented 13⅜-inch casing 1,233 ft.
Rycade Oil Corp. and Vacuum Oil Co.'s No. 1 Wisdom, Lake Jackson ..... Rig.
Shell Petroleum Corp.'s No. 4 Blakely-Danbury ..... Made drill stem test sand 1,430-36 ft.; filled 3 joints mud showing oil.
Steel & Strickland's No. 1 Lockridge ..... Spudded and shut down.
United Oil Syndicate's No. 1 Moores, Francis Moore Sur. ..... Shut down 1,462 ft.

CALHOUN COUNTY

The Texas Company's No. 1 Thomas, J. P. Tiller Sur. ..... Drlg. sticky shale 4,056 ft.

CHAMBERS COUNTY

Chicago Oil Corp.'s No. 1 Lawrence ..... Total depth 3,948 ft.; cemented casing.
Shell Petroleum Corp.'s No. 1 Herff, Moss Bluff ..... Temporarily abandoned 5,630 ft.
Pure Oil Co.'s No. 1 J.H.K. Ranch, Oyster Bayou ..... Total depth 4,125 ft.; drlg. water well.
Superior Oil Corp.'s No. 1 Jackson ..... Drlg. hard sandy lime 4,167 ft.
The Texas Company's No. 1 Jackson, T.&N.O. Sur., Sec. 17 ..... Washing 6,044 ft.

GRIMES COUNTY

Deering & Noble's No. 1 Templeman, 6 miles south Navasota ..... Drlg. shale 2,640 ft.

HARDIN COUNTY

D. O. Speights' No. 1 Fee, near Batson ..... Drlg. shale and lime 2,748 ft.

HARRIS COUNTY

Baldwin and associates' No. 1 Kitzman, Cypress ..... Shut down 4,247 ft.
Gulf States Oil Co.'s No. 1 Angsperger ..... Rig.
Humble Oil & Ref. Co.'s No. 8 Warren, Hockley ..... Rig.
Humble Oil & Ref. Co.'s No. 3 Minnetex, Mykawa ..... Drlg. sandy shale 3,104 ft.
Mission Drilling Co.'s No. 1 E. Cook ..... Drlg. gumbo 1,862 ft.

JACKSON COUNTY

Jackson County Oil Syndicate's No. 8 Drushell, Edna ..... Total depth 3,546 ft.; reaming.
Jackson County Oil Syndicate's No. 2 Lee ..... Drlg. shale 3,033 ft.
The Texas Company's No. 1 C. A. Mitchell, G. Erlwig Sur. ..... Drlg. sandy shale 6,044 ft.

JEFFERSON COUNTY

Deep Test Oil Co.'s No. 1 McFaddin, Chaisson Sur. ..... No report.
Gulf Production Co.'s No. 2-A Junker, Fannett ..... Abandoned 4,656 ft.
Westbury Oil Co.'s No. 1 West, Choate Sur. ..... Shut down 3,756 ft.

LIBERTY COUNTY

Gulf Production Co.'s No. 2 McFaddin, Moss Bluff ..... Drlg. gumbo 1,759 ft.
Humble Oil & Ref. Co.'s No. 1 Breeding, Moss Bluff ..... Rig.
Humble Oil & Ref. Co.'s No. 1 Orlando Hylton, Moss Bluff ..... Rig.
Tucker et al's No. 1 Bell, Devers ..... Derrick.

MATAGORDA COUNTY

Empire Gas & Fuel Co.'s No. 1 Boker, Citrus Grove ..... Sand and boulders 1,060 ft.; cem. 12½-in. casing.

MONTGOMERY COUNTY

Price & Whitehead's No. 2 Guerges ..... No report.

REFUGIO COUNTY

Blanco Oil Co.'s No. 1 Dorman ..... Drlg. shale 2,955 ft.

VICTORIA COUNTY

Houston Oil Co.'s No. 1 McFaddin, C. O. Edwards Sur. ..... Rig.
The Texas Company's No. 1 McFaddin, H. Bonny Sur. ..... Drlg. gumbo 2,504 ft.
Lion Oil & Ref. Co.'s No. 2 McFaddin, M. Traviers Sur. ..... Drlg. sand 4,032 ft.; cem. 8¼-in. casing 4,012 ft.
Newton et al's No. 1 West ..... Shut down 1,550 ft.

WALKER COUNTY

Texas State Oil Co.'s No. 2 Foils, H.&T.C. Sur., Abstract 287 ..... Drlg. shale and lime 2,696 ft.

WALLER COUNTY

Kirby Pet. Co.'s No. 2 Rogers, San Felipe ..... Drlg. sand and shale 3,404 ft.
W. P. Morris' No. 1 Chapman, Donoho Sur. ..... Fishing 2,966 ft.

WASHINGTON COUNTY

W. Birdwell's No. 1 Schram, James Walker Sur. ..... Shut down 2,110 ft.
Clifton et al's No. 1 Pruiss, E. Alcorn Sur. ..... Shut down 1,610 ft.

SOUTH LOUISIANA
ACADIA PARISH

Charles P. Siess' No. 1 Roller, Sec. 8-9s-1e ..... No report.

CALCASIEU PARISH

Wilfred Lahay's No. 2 James ..... Standing 3,970 ft.

CAMERON PARISH

Shell Petroleum Corp.'s No. 15 Watkins, Black Bayou ..... Derrick.
Shell Petroleum Corp.'s No. 1 State, Black Bayou ..... Drlg. hard sandy lime 2,424 ft.
Vacuum Oil Co.'s No. 1 Cameron Meadows, Sec. 21-14s-13w ..... Drlg. sticky shale 4,138 ft.
The Texas Company's No. 6 State, Calcasieu Lake ..... Rigging up.

IBERIA PARISH

Lake Oil Co.'s No. 1 Ben White, Sec. 54-12s-7e ..... No report.
Jefferson Lake Oil Co.'s No. 7 Lake Peigneur, Jefferson Lake ..... No report.
Jefferson Lake Oil Co.'s No. 8 Lake Peigneur, Jefferson Lake ..... Location.
The Texas Company's No. 5 Vermillion Bay ..... Drlg. sand 5,720 ft.

IBERVILLE PARISH

Shell Petroleum Corp.'s No. 5 Wilbert, White Castle ..... Drlg. water sand 3,020 ft.
Standard Oil Co.'s No. 5 Wilbert, Bayou Blue ..... Drlg. 2,950 ft.
Standard Oil Co.'s No. 7 Wilbert ..... Derrick.
Standard Oil Co.'s No. 8 Wilbert ..... Drlg. 1,310 ft.
Standard Oil Co.'s No. 1 E. B. and S. P. Schwing, Bayou Blue ..... Driving piling.
Standard Oil Co.'s No. 1 Baist Cooperage, Bayou Blue ..... Building derrick.
Standard Oil Co.'s No. 2 Case, Bayou Des Glaise ..... Location.

JEFFERSON PARISH

Humble Oil & Ref. Co.'s No. 1 Delaware, Sec. 2-16s-23e ..... Total depth 1,960 ft.; sidetracked and drlg. packed sand 1,333 ft.

JEFFERSON DAVIS PARISH

Shell Petroleum Corp.'s No. 1 Heyd, Iowa ..... Location.
Vacuum Oil Co.'s No. 1-A DeVilbiss, Roanoke ..... Derrick.

LAFAYETTE PARISH

Pure Oil Co.'s No. 1 Marmetin, Carenero ..... Drlg. sand and shale 5,586 ft.

LA FOURCHE PARISH

The Texas Company's No. 1 Leesville ..... Total depth 5,448 ft.; trying to sidetrack 2,638 ft.

PLAQUEMINE PARISH

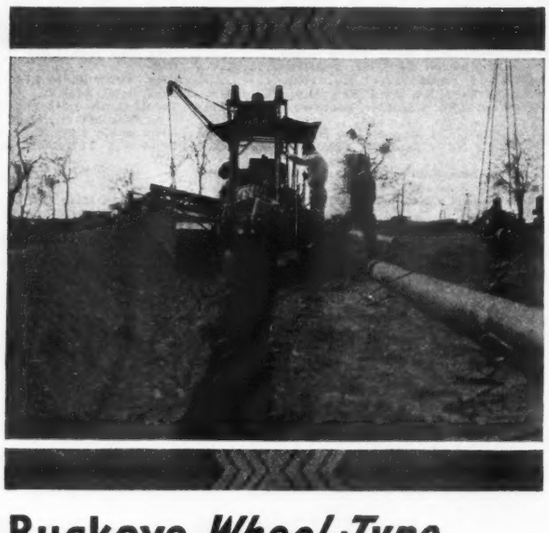
Humble Oil & Ref. Co.'s No. 1 Lake Washington, Lake Grand Ecaille ..... Fishing liner 5,440 ft.
Humble Oil & Ref. Co.'s No. 2 Cockrell-Moran, Lake Grand Ecaille ..... Moving in material.
Humble Oil & Ref. Co.'s No. 3 Cockrell, Lake Grand Ecaille ..... Cap rock 1,525-44 ft.; pumping water into cavity.
The Texas Company's No. 4 State, Garden Island ..... Standing 718 ft.

ST. LANDRY PARISH

Herbert-Baker Oil Co.'s No. 1 Fisher, Sec. 16-3s-4e ..... Fishing 4,378 ft.

ST. MARTIN PARISH

The Texas Company's No. 3 St. Martin, Hager ..... Total depth 2,243 ft. in salt; abandoned.



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ST. MARY PARISH

Louisiana Land & Exploration Co.'s No. 1 Fox, Berwick..No report.
The Texas Company's No. 1 South Coast, Sec. 41-14s-10e..No report.

TERREBONNE PARISH

Freeport Sulphur Co.'s No. 1 Nelson, Sec. 12-21s-11e.....No report.
Charles Paggi's No. 2 Evergreen, Sec. 14-15s-16e .....Standing 1,818 ft.
The Texas Company's No. 4 State, Bay St. Elaine .....Washing 5,560 ft.
The Texas Company's No. 5 State, Bay St. Elaine .....Location.
The Texas Company's No. 3 State, Caillou Island .....Cap rock 2,969-84 ft.
The Texas Company's No. 4 State, Calliou Island .....Location.
The Texas Company's No. 5 State, Calliou Island .....Location.
The Texas Company's No. 3 State, Dog Lake .....Derrick.
The Texas Company's No. 4 La. L. & E. Four Isle.....Total depth 1,169 ft.; fishing.
The Texas Company's No. 2 La. L. & E., Bay Junop.....Rig.
The Texas Company's No. 5 State, Lake Barre .....Rig.

SOUTHWEST TEXAS

(Continued from Page 54)

M. V. Lawrence, 150 feet north and west lines of 27-acre tract in the S. Miller Survey, total depth 1,852 feet, completed, initial production 100 bbls.

Jennings-Cuellar—Zapata County

O. W. Killam's (Killam-Duggan) No. 17-B Cuellar, 150 feet south line, 150 feet southwest line, Survey 277; total depth 1,545 feet; completed, 100 bbls. O. W. Killam's No. 2 A. Martinez, 150 feet north line, 150 feet east line, Block 15, Survey 75; total depth 1,623; completed, 10,000,000 feet of gas.

Jennings-Muckleroy—Zapata County

Allied Gas Co.'s No. 13-A Trevino, 150 feet northwest line, 150 feet east line, Block 6, Survey 65; total depth 1,243 feet; gas well, spraying oil. Same company's No. 14-A Trevino, 470 feet southwest line, 150 feet southeast line, Block 6, Survey 65; total depth 1,249 feet; completed, 100 bbls. Same company's (Nordan & Morris-Allen & Morris) No. 3 E. Gutierrez, 4,263 feet southeast line, 750 feet northeast line, Share 4, Fansler partition, Comitas grant; total depth 1,270 feet; completed, 125 bbls. S. R. C. Co.'s No. 4-A Trevino, 150 feet from north line, 150 feet east line, Block 8, Survey 66; total depth 1,280 feet; completed, 65 bbls. Same company's No. 10-B F. Cuellar, 150 feet southeast line, 150 feet northeast line, Block 7, Survey 65; total depth 1,244 feet; completed, 80 bbls. Winch & Henne's No. 1 Jose Bustamente, 150 feet southwest line, 150 feet southeast line, Share 35, Fansler partition, Comitas grant; total depth 1,374 feet; completed, estimated 25 bbls., some salt water.

ABANDONED TESTS

Darst Creek—Guadalupe County

Magnolia Petroleum Co.'s No. 3 L. V. Echols, 2,400 feet southwest line, 1,100 feet southeast line of farm in the James Hodges Survey, total depth 2,705 feet, abandoned.

Chapman Pool—Williamson County

E. R. Ertel and others' No. 6 J. C. Abbott, total depth 800 feet, abandoned.

Pettus Area—Bee County

Rio Bravo Oil Co.'s No. 7 S.A.A.P. R.R., center of A. Smalley Survey, total depth 3,919 feet, abandoned dry. George A. Henshaw's No. 1 Beck, 150 feet north line, 150 feet west line of Lot 2, Hicks-Hall Cotton Subdivision, M. Urango Survey, total depth 4,273 feet, abandoned dry.

Pettus Area—Goliad County

Doctor Hewitt and others' No. 1 Ray, 200 feet each way out of southwest corner of B.&B. Survey, total depth 4,315 feet, abandoned.

Agua Dulce Pool—Nueces County

South Texas Producing Co.'s No. 1 J. A. Daudermann, 450 feet south-north line, 450 feet west-east line of Block 13, of the SE, Section 32, Benton Pasture Subdivision, total depth 4,007 feet, abandoned dry.

Cole Pool—Webb County

South Texas Producing Co.'s No. 2 S. Benavides, 250 feet northwest line, 150 feet southwest line, Myrtle E. Hale Subdivision, Block 24, Mariano Arispe grant; total depth 3,005 feet; abandoned, dry.

Jennings-Muckleroy—Zapata County

S. R. C. Co.'s No. 9-B F. Cuellar, 150 feet southeast line, 150 feet southwest line, Block 10, Survey 65; total depth 1,294 feet; abandoned.

NEW LOCATIONS

Bruner Pool—Caldwell County

Humble Oil & Refining Co.'s No. 6 W. H. New, location.

Dobrowolski Pool—Bexar County

Collins & Edmiston's No. 1 Halverdier, 1,997 feet to west line, 150 feet southwest line of 109-acre tract in the J. Perego Survey, total depth 704 feet, set and cemented.

Darst Creek Pool—Guadalupe County

Gulf Production Co.'s No. 4-A Dix-McKean, 300 feet northeast of No. 2, 150 feet northwest of southeast line in the J. R. Robinson Survey, total depth 2,423 feet, drilling in Del Rio. Humble Oil & Refining Co.'s No. 7 D. D. Baker, 30 feet south line, 630 feet east line of 60-acre tract in the J. C. Darst Survey, total depth 2,570 feet, in Edwards, swabbing. Same company's No. 3-A A. E. Dowdy, location. The Texas Company's No. 5-A Knoblock, location. F. L. Thompson's No. 2 W. R. Posey, location.

Chapman Pool—Williamson County

Alford and others' No. 1 Kirkendall, total depth 1,920 feet, drilling. W. A. Anderson's No. 7 M. V. Lawrence, location. Same owners' No. 8 M. V. Lawrence, location. Same owner's No. A-5 T. P. Simmons, total depth 1,465 feet, set 6⅝-inch casing. Same owner's No. A-6 T. P. Simmons, location. W. D. Anderson and others' No. 1 S. J. Smith, total depth 2,575 feet, drilling. Bartlett & Wilson's No. 1 R. E. Stewart, total depth 741 feet. Same owner's No. 2 R. E. Stewart, total depth 790 feet, drilling. Big Indian Royalty Pool Co.'s No. 1 A. Rosenberg, total depth 1,150 feet, shut down. E. R. Ertel and others' No. 6 J. C. Abbott, total depth 800 feet, abandoned. E. L. Chapman's No. B-6 J. C. Abbott, derrick. Same owner's No. 1 F. Fuchs, total depth 850 feet, fishing. Same owner's No. 6 T. P. Simmons, total depth 1,878 feet, drilling. Same owner's No. C-3 J. J. Sides, total depth 1,200 feet, in shale. J. L. Collins' No. 5 M. V. Lawrence, 150 feet west line, 515 feet south line of 27-2 tract in the S. Miller Survey, total depth 1,462 feet, serpentine. J. L. Collins & Co.'s No. 7 M. V. Lawrence, 150 feet east line, 215 feet south line of 27-2 tract in the S. Miller Survey, location. E. R. Ertel's No. 1 H. Swanson, derrick. Elliott & Moore's No. 1 A. J. Carlson, total depth 40 feet, in shale. C. Link and others' No. 6 Swanson, total depth 1,544 feet, in lime and shell. A. J. Luke's No. 1 A. Simmons, 500 feet from north line, 450 feet west line of 25-acre tract in the H. Owen Survey, location. McNeil's No. 6 Kilgore, total depth 1,040 feet, in shale. Manning & Anderson's No. 1 Cooper, total depth 1,137 feet, shut down. W. C. Marshall's No. 2 R. A. Krugere, total depth 1,700 feet, drilling. E. R. Marts' No. 4 T. P. Simmons, 150 feet west of center of east line of 17-acre tract in the S. Miller Survey, location. Reubotham's No. 1 S. H. Jarrel, total depth 40 feet, shut down. Rosenfield's No. 1 Pfluger, total depth 1,234 feet, fishing. M. M. Rowan's No. 1 A. Jackson, total depth 1,900 feet, shut down. Southland Development Co.'s No. 1 T. Lawler, derrick. G. Stratton's No. 2 J. C. Abbott, 300 feet west of No. 3 in the S. Miller Survey, location. Same owner's No. 3 J. C. Abbott, 300 feet west of No. 4 in the S. Miller Survey, total depth 1,575 feet, set 6⅝-inch casing. Same owner's No. 4 J. C. Abbott, 150 feet north line, 450 feet east line of 32-acre tract in the S. Miller Survey, location. Same owner's No. 5 J. C. Abbott, 450 feet east line, 150 feet south line, 32-acre tract in the S. Miller Survey, location. Jess Tom Berlin's No. 1 C. M. Pasture, total depth 1,410 feet, shut down. Wilson and others' No. 1 A. B. Simmons, total depth 652 feet, in green sand. Same owner's No. 1 C. Sitman, total depth 2,850 feet, in sandy lime. R. S. Wilson's No. 1 J. A. Walker, derrick. J. R. Welder's No. 1 J. C. Abbott, 310 feet north line, 150 feet east line

10-acre tract in the H. Owen Survey, total depth 2,100 feet, in shale.

Pettus Area—Bee County

Cosden Oil Co.'s No. 4 McKinney, 497 feet north of No. 2 on the same lease and 300 feet from east line of the lease, location. C. R. M. Drilling Co.'s No. 1 Block 34, center of block, moving in tools. Union Producing Co.'s No. 24 Ray, 812 feet south line, 1,625 feet west line of P. Miller Survey, location.

Lasater Pool—Brooks County

Houston Oil Co.'s No. 2 Holbein-Wormser, 962-acre tract in the E. P. de Maguellas Survey, total depth 3,141 feet, drilling in hard sand. Southern Crude Oil Purchasing Co.'s No. 1 Holbein-Wormser, 990 feet east line, 1,000 feet south line of Block 38 in the E. P. de Maguellar Survey, moving in tools.

Pettus Area—Goliad County

Union Producing Co.'s No. 27 Ray, 1,500 feet southeast line, 4,550 feet southwest line of the J. Gomez Survey, location.

Edna Pool—Jackson County

Wright Brothers' No. 2 Lee, total depth 3,000 feet, drilling in gumbo and shale.

Kohler Pool—Duval County

South Texas Producing Co.'s No. 1 Dinn, 660 feet to north line, 660 feet to east line, Survey 143; location.

Cole Pool—Webb County

Trussell, Cezeaux & Partee's No. 1 Bruni, 150 feet northeast line, 300 feet southeast line, Block 35, Adams Subdivision, Survey 10, Mariano Arispe grant; location. South Texas Producing Co.'s (Humble) No. 3 S. Benavides, 150 feet northeast line, 150 feet northwest line, Block 429, Myrtle E. Hale Subdivision, Mariano Arispe grant; location.

Jennings-Muckleroy—Zapata County

Allied Gas Co.'s No. 3-B Trevino, 150 feet to northwest line, 150 feet to east line, Block 15, Survey 65; location. Same company's No. 4-B Trevino, 150 feet east line, 350 feet northwest line, Block 15, Survey 65; location. Same company's No. 5-B Trevino, 260 feet east line, 485 feet northwest line, Block 15, Survey 65; location. Same company's No. 6-B Trevino, 150 feet east line, 775 feet northwest line, Block 15, Survey 65; location. Same company's No. 7-B Trevino, 980 feet northwest line, 150 feet east line, Block 15, Survey 65; total depth 200 feet, drilling. Same company's No. 8-B Trevino, 520 feet northwest line, 465 feet east line, Block 20, Survey 65; location. Same company's (Allen & Morris) No. 4 E. Gutierrez, 4,263 feet southeast line, 1,050 feet northeast line, Share 4, Fansler partition, Comitas grant; total depth 1,200 feet, drilling. Nix & Blankenship's No. 3 Montemayor, 490 feet north line, 150 feet west line, Block 1, Survey 64; total depth 1,200 feet, drilling. S. R. C. Co.'s No. 12-B Cuellar, (location later), spudded.

Jennings-Cuellar—Zapata County

O. W. Killam's No. 3 Lopez, Survey 75, (location later); spudded. O. W. Killam's No. 1 Slator, Block 1, Slator Pasture, Borrego grant; spudded.

DRILLING ACTIVITY

Dobrowolski Pool—Bexar County

Bolling & Michael's No. 1 J. P. Adams, 150 feet south line, 300 feet west line of lease in the Miguel Cortaris Survey, total depth 662 feet, preparing to deepen. Eckert & Son's No. 7 L. Sandemeyer, 150 feet west line, 500 feet south line of 110-acre tract, Survey 52, location. Penn-Tex Oil Co.'s No. 3 Sandemeyer, 300 feet west of No. 2 in the M. Menchaco Survey, spudding in.

Buchanan Pool—Caldwell County

Buchanan-Danciger's No. 2 L. K. Brown, 300 feet north of No. 1 in the C. M. Cannon Survey, set surface casing and shut down.

Darst Creek Field—Guadalupe County

Abercrombie's No. 9 Dix-McKean, 450 feet southwest line, 150 feet northwest line of 20-acre tract in the J. R. Robinson Survey, spudded in. Empire Gas & Fuel Co.'s No. 5 Dowdy, 792 feet north line, 150 feet east line of tract in the J. C. Darst Survey; total depth 2,573 feet in Edwards, swabbing. Humble Oil & Refining Co.'s No. 8 D. D. Baker, 980 feet west of southeast corner of 60-acre Baker tract, 150 feet south line, rigging up. Same company's No. 3 Dowdy, 180 feet northeast line, 60 feet to south of county road on 52-acre lease, location. Same company's No. A-2 Dowdy, southwest part of Darst Creek, offset to Empire's No. 5 Dowdy, northeast corner of "A" lease, location. Luling Oil & Gas Co.'s No. 1 Goldman, 690 feet southwest line, 150 feet northwest line, total depth 2,530 feet, drilling in Buda. Magnolia Petroleum Co.'s No. 4 L. V. Echols, 400 feet west of No. 3 Echols, 150 feet from the lease line, location. Simms Oil Co.'s No. 4 Manford, location. L. C. Turman's No. 2 State in the Jacob C. Darst Survey, total depth 2,575 feet, swabbing from Edwards. The Texas Company's No. 8-B C. Knoblock, 1,080 feet northeast line, 150 feet southeast line of 75-acre tract in the J. R. Robinson Survey, location. Witherspoon Oil Co.'s No. 1 Baker, 300 feet north of Jarmons' No. 1 Baker on 40-foot strip between Humble's Baker lease on west and The Texas Company's Dallas Wilson lease on east in the Jacob C. Darst Survey.

Chapman Pool—Williamson County

Fred Beatty's No. 1 J. R. Pumphrey, 1,328 feet south and east lines of Mrs. J. B. Pumphrey 168-acre tract in the W. Cartwright Survey, total depth 1,500 feet, shut down.

Lion-McFadden Pool—Victoria County

Houston Oil Co.'s No. 1 McFadden, 320 feet south, 900 feet east of southeast corner of survey, 1¼ miles southwest of Lion Oil Co.'s gasser and 1¾ miles east of The Texas Company's No. 1 McFadden in the L. Mann Survey, rigging up. Lion Oil Refining Co.'s No. 2 McFadden, 1,917 feet west of northeast corner, 512 feet at right angles from north line of C. O. Edwards Survey in M. J. Travesia Survey, total depth 4,031 feet, setting casing.

Pettus Area—Bee County

Arkansas Fuel Oil Co.'s No. 1 J. Kimball, 200 feet to south line, 200 feet to west line of 80-acre tract in the A. C. Billingsley 249-acre tract in the Stephen Winship Survey, total depth 3,660 feet, drilling. Batex Petroleum Co.'s No. 2 Burnett, 361 feet to north line, 900 feet to east line of lease in the John Pace (South) Survey, drilling plug, setting 389 feet surface casing. Getty Oil Co.'s No. 1 Block 40 Townsite, George A. Kerr Survey, total depth 3,625 feet, drilling. Glasscock Brothers' No. 2 Pettus Townsite, center of Block 24, total depth 3,879 feet, waiting on casing. Grayburg Oil Co.'s No. 1 S. D. Copeland, 150 feet southeast corner of north half of William Sanford Survey, total depth 3,580 feet, reaming down. Same company's No. A-1 J. A. Kimball, center of 189-acre Stephen Winship Survey, total depth 3,568 feet. This test first was carried as Grayburg's No. 1 Kimball, now carried as No. A-1 Kimball, swabbing. Same company's No. B-1 Kimball, 150 feet each way from southwest cor. of 80-acre tract or 2,700 feet to east line, 2,100 feet to south line of survey in the Stephen Winship Survey, total depth 3,690 feet, drilling. Hicks & Young's No. 1 Billingsley, 155 feet south and west of tract in the B. Q. Hadley Survey, total depth 360 feet, shut down. Houston Oil Co.'s No. 2 Neumann, east offset to Cosden's No. 2 McKinney in the George A. Kerr Survey, rigging up. Same company's No. 1 Townsite, center of Block 21, total depth 1,128 feet, set 10-inch casing at 465 feet; now drilling. Same company's No. 1 Pettus Townsite, center of Block 23, total depth 3,000 feet, drilling. Same company's No. 1 Pettus Townsite, center of Block 33, total depth 2,900 feet, drilling. Same company's No. 2 Pettus Townsite, center of Block 35, total depth 3,050 feet, drilling. Humble Oil & Refining Co.'s No. 5 McKinney, 150 feet south of south line of Pettus Townsite direct offset to Houston Oil Co.'s No. 1 Beasley in the G. A. Kerr Survey, total depth 3 895 feet. Lange & Mimms' No. 1 Billingsley, 155 feet to south and west lines of Billingsley 10 acres out of 150-acre tract in the J. Pointevent Survey, total depth 380 feet; waiting on cement after setting 10-inch surface casing. Rio Bravo Oil Co.'s No. 1 S.A.A.P. Ry., 58 feet north of south line, 120 feet west of west line of Block 3, Pettus Townsite in the G. A. Kerr Survey, spudded in. Same company's No. 3 S.A.A.P. Ry. in the G. A. Kerr Survey, location. S. R. C. Co.'s No. 1 Block 19 Townsite, center of block, total

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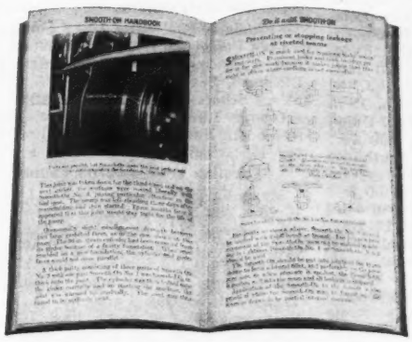

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depth 3,960 feet; plugging back. Same company's No. 1 Block 31 Townsite, center of block total depth 300 feet, drilling. Same company's No. 1 A. Theis, 2,700 feet north line, 300 feet west line of 782-acre tract in the R. S. Burns Survey, spudded in. Southland and others' No. 1 Billingsley, 155 feet to south line, 155 feet to west line of 40 acres off north end of 150 acre in the B. Q. Hadley Survey, derrick. Swift and others' No. 1 Mauldin, 155 feet north and east lines of 10-acre tract out of the Mauldin west 125-acre tract in the J. Pointevent Survey, total depth 190 feet, set surface casing, waiting on cement. Sun Oil Co.'s No. 1 Burnett, 371 feet north line, 300 feet east line of lease in the South John Pace Survey; rigging up. The Texas Company's No. 2 J. R. Scott, 200 feet north line, 150 feet west line, in the J. M. Urango Survey; total depth 620 feet, drilling. Some company's No. 3 J. R. Scott, 7,100 feet southwest of No. 1, in the J. M. Urango Survey; location. Union Producing Co.'s No. 10 Ray, 150 feet north line, 150 feet east of the southwest corner of Block 240 G. Neil Survey; total depth 4,040 feet; test showed 50 feet of oil in 11 minutes, also 350 feet of sand and mud. Same company's No. 17 Ray, 1,200 feet north of No. 11; total depth 308 feet waiting on cement. Same company's No. 18 Ray, east offset to Buchanan & Ogden's No. 1, Block 38, George A. Kerr Survey, building derrick. Same company's No. 19 Ray, east offset to Block 37 townsite, in the George A. Kerr Survey, rigging up. Same company's No. 20 Ray, east offset to Humble's No. 5 McKinney, 150 feet south, 150 feet east of southeast corner of Pettus Townsite, George A. Kerr Survey, rigging up. Same company's No. 21 Ray, east offset to Block 40 Townsite 900 feet south, 150 feet east of northeast corner of Townsite, George A. Kerr Survey; location. Same company's No. 22 Ray, east offset to Block 39, 1,260 feet south, 150 feet east of northeast corner of Townsite; changed to No. 23. Wilson & Hill's No. 1 Block 14, Townsite, center of block; location. Same owner's No. 1 Roberts, center of Block 16, Pettus Townsite; permit granted; erecting derrick. Nichols Oil Corp.'s No. 4 Hicks, 550 feet east of west line, 430 feet south of north line of Block 20 930 feet due south of No. 3 Hicks, in the Jose Maria Urangua Survey; total depth 4,306 feet; in sandy shale, testing.

Lasater Pool—Brooks County

Ed East's No. 1 B. Garcia, 1,700 feet west, 750 feet south line of north 1,000-acre tract, Share A-1, Las Mestena y Gonzalene tract, total depth 1,109 feet, being worked over.

Pettus Area—Goliad County

Union Producing Co.'s No. 12 Ray, 2,350 feet south of northeast line, 300 feet northwest of southeast line George A. Ray 400 acres, northwest of Zoch gasser in the William Southerland Survey, total depth 4,465 feet, coring.

Edna Pool—Jackson County

Jackson County Oil Syndicate's No. 8 Drushell, total depth 3,450 feet, drilling in gumbo. The Texas Company's No. 1 C. A. Mitchell, 1,750 feet east, 880 feet north of SW cor. of survey in the G. Ewing Survey, total depth 5,971 feet, drilling in hard sandy shale, drill stem test at 5,850 feet showed salt water.

Cartwright Pool—Live Oak County

Houston Oil Co.'s No. 1 R. Boothe, 3,000 feet west line, 300 feet south line of 822-acre tract in the M. B. Kilvon Survey, total depth 5,257 feet, reaming down to set casing. Same company's No. 22 Cartwright (22 acres), 500 feet east of No. 18 in the J. M. Colchado Survey, total depth 4,052 feet, drilling.

Agua Dulce Pool—Nueces County

Houston Oil Co.'s No. 1 M. E. Brooks, 300 feet north and east lines of fractional Section 29, Benton Pasture Subdivision, Los Sauces grant, total depth 5,325 feet, drilling. Saxet Oil Co.'s No. 2 Donnegan, 2,150 feet due south of No. 1 Donnegan, location. Same company's No. 6 John Dunn, 600 feet south of No. 5 Dunn, total depth 4,180 feet, installing heavier rig to drill deeper.

Kohler Pool—Duval County

Simms Oil Co.'s No. 9 Dinn, 660 feet east line, 660 feet south line, NW, Survey 143; rigged up, standing. Humble Oil & Refining Co.'s No. 48 Kohler, 990 feet to south line, 475 feet to east line, Survey 172; rigged up.

Cole Pool—Duval County

W. E. Mulholland's (Miller I. Shaw) No. 2 S. Benavides, 218 feet north line, 1,050 feet west line, Survey 173; total depth 1,700 feet, drilling.

Schoolfield-O'Byrne—Duval County

C. E. Long and others' (Shell) No. 1 Bishop Duval Land Co., 2,800 feet north line, 160 feet west line, Survey 59; rigged up. Magnolia Petroleum Co.'s No. 1 Lundell, 450 feet north line, 150 feet east line, SE, Survey 60; total depth 5,762 feet, drilling shale. Same company's No. 1 Hahl-Norton, 885 feet west line, 600 feet south line, Survey 61; total depth 550 feet, drilling.

Randado Pool—Jim Hogg County

Cole Petroleum Co.'s No. 1 Wood, 802 feet west line, 547 feet southwest line, Block 16, Survey 82; location.

Schott Pool—Webb County

George Marshall's No. 2 Garcia, 1,170 feet north line, 2,490 feet east line, Survey 458; rigging up.

Carolina-Texas—Webb County

Magnolia Petroleum Co.'s No. 1 Jones-Wright, 330 feet south line, 330 feet west line, Survey 674; total depth 2,260 feet, coring. W. R. Shankle's No. 2 Webster, Survey 684, 1,170 feet west line, 150 feet south line; rigging up. Washington Texas Oil & Gas Co.'s No. 1 R. O. Barnsley, 325 feet south line, 768 feet east line, Block 16, Survey 268; total depth 700 feet, drilling.

Cole Pool—Webb County

French Oil Corp.'s No. 3-A Rosa Benavides, 950 feet north line, 150 feet west line, Survey 659; total depth 2,342 feet, testing, light showing of oil. Magnolia Petroleum Co.'s No. 4 A. Benavides, 950 feet north line, 150 feet east line, Survey 660; total depth 2,340 feet, reaming tubing. O. W. Killam's No. 19 Bruni, Block 1, Survey 8, Mariano Arispe grant; derrick. O. W. Killam's No. 5 Bruni, 270 feet northwest line, 203 feet southwest line, Adams Subdivision, Block 26, Survey 8, Mariano Arispe grant; total depth 3,009 feet, tested oil, gas and salt water; plugging back to make gas well.

Pappas Pool—Zapata County

John Pappas Pool, Inc.'s No. 1 Flores, 2,977 feet southeast line, 6,000 feet northeast line, Porcion 35, Rio Grande River; rigging up.

Charco Redondo—Zapata County

C. R. Moore and J. W. Moore's No. 1 Adela G. de Flores, 330 feet northeast line, E. M. Doty Oil & Gas Subdivision, Block 99, Charco Redondo grant; total depth 150 feet, waiting on cement. C. R. Moore and J. W. Moore's No. 2 Adela G. de Flores, 150 feet northeast line, 150 feet southeast line, E. M. Doty Oil & Gas Subdivision, Block 151, Charco Redondo grant; total depth 50 feet, standing. Mid-West Public Utilities' No. 1 Garcia, 450 feet southwest line, 450 feet southeast line, M. P. de Garza tract, Block 33, Pedernal grant; total depth 1,381 feet, standing.

Jennings-Muckleroy—Zapata County

Alamo Drilling and Leasing Co.'s (Claggett) No. 4 Trevino, Block 1, Survey 66; total depth 300 feet, drilling. Same company's (Blair) No. 4 Trevino, 150 feet west line, 150 feet north line, Block 1, Survey 66; total depth 1,242 feet, testing. Same company's (Claggett) No. 6 Trevino, 450 feet south line, 150 feet east line, Block 1, Survey 66; location. Same company's (Blair) No. 6 Trevino, 175 feet east line, 500 feet north line, Block 1, Survey 66; total depth 1,000 feet, drilling. Same company's (Claggett) No. 5 Trevino, 150 feet south line, 150 feet east line, Block 1, Survey 66; location. Same company's (Claggett) No. 4 Trevino, 490 feet east line, 150 feet south line, Block 1, Survey 66; location. Nordan & Morris and Grimm & Yakey's No. 1 M. Trevino, 510 feet north line, 150 feet west line, Block 5, Survey 412; total depth 1,185 feet, coring. Grimm & Yakey's No. 1 E. de los Santos, 382 feet southwest line, 150 feet southeast line, Share 7, Fansler partition, Comitas grant; total depth 1,280 feet, tested small amount of oil, drilling. Nordan & Morris and Grimm & Yakey's No. 1 S. Bustamente, 990 feet northeast line, 150 feet northwest line, Share 34, Fansler partition, Comitas grant; location. Nordan & Morris and Grimm & Yakey's No. 2 C. Bustamente, 150 feet northeast line, 150 feet southeast line, Fansler partition, Comitas grant, Share 33; location. Allied Gas Co.'s (Nordan & Morris) No. 2-B M. Trevino, 1,533 feet southwest line, 150 feet northwest line, Block 15, Survey 65; total depth 1,249 feet, waiting on cement. Same company's No. 9-A I. G. Trevino, 450 feet southeast line, 150 feet east line, Block 6, Survey 65; derrick. Same company's No. 16-A Trevino, 150 feet northwest line, 1,650 feet southwest line, Block 6, Survey 65; location. Same company's No. 15-A Trevino, 150 feet east line, 750 feet southeast line, Block 6, Survey 65; total depth 1,234 feet, shut down, waiting on cement. Edgington & Niles' No. 4-B I. G. Trevino, 750 feet southwest line, 150 feet southeast line, Block 4, Survey 65; total depth 1,227 feet, testing. Same firm's No. 5-B I. G. Trevino, 150 feet southeast line, 1,050 feet southwest line, Block 4, Survey 65; location. Same firm's No. 7-A Trevino, 150 feet from southeast line, 150 feet east line, Block 5, Survey 65; total depth 1,214 feet, bailing. Keen & Jackson's No. 1 M. Garza, 150 feet northwest line, 150 feet southwest line, Block 59, Subdivision Zorro Ranch, Comitas grant; rigging.

S. R. C. Co.'s No. 1 F. Cuellar, 150 feet northwest line, 150 feet northeast line, Block 7, Survey 65; derrick. Same company's B. F. Cuellar, 150 feet northwest line, 150 feet southwest line, Block 7, Survey 65; derrick. Same company's No. 11-B Cuellar, 450 feet southeast line, 150 feet southwest line, Block 7, Survey 65; total depth 800 feet, drilling. Same company's No. 5-A Trevino, 150 feet south line, 150 feet west line, Block 16, Survey 66; total depth 1,268 feet, waiting on cement. Whicker, Arnold & Ahler's No. 3 Garza, 150 feet southwest line, 150 feet southeast line, Block 1, Subdivision Zorro Ranch, Comitas grant; derrick. W. R. Shankle's No. 5 Trevino, 1,195 feet north of the south corner, 150 feet east line, Block 15, Survey 65; location. W. R. Shankle's No. 6 Trevino, 450 feet southeast line, 150 feet northeast line, Block 14, Survey 65; total depth 1,248 feet, shut down. Skoglund & Maddox' No. 1 Montemayor, 150 feet west line, 450 feet north line, Block 5, Survey 63; rigging up. Gatlen & Matthews' No. 1 Garza, Block 18, Survey 413; derrick.

Jennings-Cuellar—Zapata County

O. W. Killam's No. 1 R. Lopez, Survey 71; total depth 975 feet, drilling. O. W. Killam's No. 25-B Cuellar, Survey 277; total depth 1,020 feet, drilling. O. W. Killam's No. 24-C Cuellar, 375 feet north line, 770 feet southwest line, Survey 278; total depth 1,502 feet, drilling. South Texas Producing Co.'s No. 9 Measles and others, 3,830 feet southeast line, 660 feet northeast line, Cerrito Blanco grant; total depth 1,756 feet, drilling.

CANADIAN FIELDS

(Continued from Page 59)

25,000,000 feet a day. Royalite Oil Co.'s No. 9 at 5,593 feet is pulling on liner. Royalite's No. 20, LSD 7, Section 12-20-3w5, which has been taking light crude production at 3,212 feet, is rigging up rotary to deepen to the lime. Royalite's No. 25, N half, Section 31-19-2w5, is drilling in shale at 395 feet. Dalhousie Oil Co.'s No. 7, LSD 11, Section 18-20-2w5, is drilling 255 feet in the lime at 5,255 feet.

In South Turner Valley, Home Oil Co.'s No. 5, LSD 7, Section 20-19-2w5, is drilling 333 feet in the lime at 4,813 feet and has encountered a pocket of gas, but has not yet got commercial production. Home's No. 6 is drilling in shale at 3,640 feet, and Home's No. 7 is drilling in shale at 2,071 feet. Northwest-Associated's No. 2, LSD 6, is drilling in the lime at 5,050 feet.

In Section 17-19-2w5, Mayland Oil Co.'s No. 2, LSD 8, is drilling in the lime at 4,817 feet, and Mayland's No. 3 is drilling in sandstone at 4,824 feet. Lowery Petroleums' No. 2 is drilling in shale at 246 feet.

Royalite Oil Co.'s No. 24, LSD 3, Section 29-19-2w5, is at 4,363 feet and underreaming, with 10-inch casing lowered to 4,300 feet. Southern Lowery's No. 1, LSD 3, Section 9-19-2w5, is drilling at 3,942 feet.

Three Calgary companies, two with production in the Turner Valley Field, have been merged in the new Alberta Federated Oils, Ltd. recently incorporated with head offices in Calgary. The merger includes Advance Oil Co., whose No. 5-A in South Turner Valley has a fair production from the deep lime, and Mainpool Oil Co. which holds the Freeman-Lundy syndicate producing well and acreage in the Central Turner Valley. A third company, Angus Oils, Ltd. has a well drilling on the Waite Valley structure, west of the Turner Valley Field. Alberta Federated Oils, Ltd. holds an aggregate of 6,000 acres, chiefly in the Turner Valley Field.

South Turner Valley

In the South Turner Valley area, Section 4-19-2w5, is reported to show improved production in the two Mercury wells. Mercury's No. 3, LSD 2, formerly Sunlight Oils' No. 1, has recently increased its crude naphtha recovery to a peak of 223 bbls. a day, with 10-day average of 210 bbls. Mercury's No. 2, LSD 12, which showed a maximum recovery around 110 bbls., is frozen off but is preparing to clean out and restore production. Mercury's No. 1, LSD 13, shut down several months ago in the Kootenay formation at 4,585 feet, is resuming. Mercury's No. 5 has resumed drilling at 4,002 feet after running 10-inch casing at 3,960 feet. Mercury's No. 6 has derrick up and is installing machinery. In the same section, Miracle Oils' No. 1, LSD 11, is reported drilling at 4,380 feet.

In Section 16-19-2w5, East Crest Oil Co.'s No. 1, LSD 5-6, is drilling 147 feet in the lime at 4,447 feet. East Crest's No. 2-A, LSD 4, is drilling at 4,248 feet. Homestead Oils' No. 1, LSD 5, is at 4,795 feet working to recover or sidetrack tools and restore production.

Central Turner Valley

In the Central Turner Valley area, Calmont Oils' No. 1, LSD 2, Section 1-20-3w5, is 423 feet in the lime at 5,977 feet, and bailing mud in preparation for a production test.

In Section 1-20-3w5, Okalta Oils' No. 2, LSD 8, is standing cemented in the lime at 4,780 feet. Okalta's No. 3 LSD 9, is drilling 131 feet in the limestone at 4,274 feet. Sioux City Oils' No. 1, LSD 10, is drilling 840 feet in the lime at 5,225 feet. McLeod Oil Co.'s No. 5, LSD 15, is drilling in the Home sands at 4,369 feet after cementing 10-inch casing. McLeod's No. 3 is shooting and cleaning out to restore production.

Mid-Royal Oils' No. 1, LSD 4, Section 31-19-2w5, is preparing to resume at 2,140 feet. Structure Oil & Gas' No. 1, LSD 7, Section 7, same section, is drilling at 5,458 feet. Dome Oils' No. 2, LSD 16, Section 36-19-2w5, is resuming after setting surface casing at 155 feet.

In Section 12-20-3w5, New McDougall-Segur Oil Co.'s No. 3, LSD 14, is repairing at 5,112 feet; No. 4 is working on casing at 4,856 feet. British Dominion's No. 3, LSD 6, is drilling at 2,003 feet after setting 16-inch casing at 1,930 feet.

Widney Petroleums' No. 1 LSD 11, has cased off the crude oil production in the McDougall sands and is preparing to start deepening to the limestone. This test is close to Royalite's No. 11 which recently got a big production in the lime.

Spooner Oils' No. 4, LSD 14, Section 13-20-3w5, is at 3,685 feet and drilling.

Moose Dome Wildcat

In the foothills area, Moose Oils' No. 1, LSD 16, Section 29-22-6w5, on the Moose Dome structure, is attracting attention. This test got a show of green crude last February and on deepening to about 2,600 feet encountered a gas flow, estimated 2,000,000 feet a day. Attempts to drill against this flow resulted in a protracted fishing job, but the lost tools were ultimately cased off with the 10-inch string and the hole was deepened to 2,780 feet, where another gas flow, with some crude oil, was met. This flow froze off, and the drillers are now circulating and applying heavy back pressure to restore production. At present

depth of 2,790 feet, the test is 2,240 feet below the Madison-Devonian contact. On the adjacent Herron structure, Herron Petroleums' No. 1, LSD 3, Section 13-22-6w5, is drilling in black shales at 2,110 feet, after completing a fishing job.

In the Moose Mountain area, Signal Hill Oils Co.'s No. 2, LSD 9, Section 34-23-5w5, is reported resuming at 4,002 feet.

On the Highwood structure, Northwest-C. & E.'s No. 1, LSD 8, Section 35-18-3w5, is drilling in lime at 3,119 feet.

On the Waite Valley structure, Angus Oils' No. 1, LSD 5, Section 3-21-4w5, is drilling at 3,018 feet. Calgary Development's No. 1, LSD 10, Section 21-19-3w5, is at 3,042 feet and cleaning out cavings.

In the High River-Aldersyde area, Ranchmen's Gas & Oil Co.'s No. 1, LSD 16, Section 23-20-29w4, is drilling at 4,100 feet.

In the southern foothills, Source Rock Petroleums' No. 1, LSD 5-6, Section 21-9-2w5, is hauling equipment for a test in the Crestal Valley on the Watson structure. This is an untested area where a structure somewhat less pronounced and considerably larger than that of the Turner Valley gives encouraging prospects.

Border Fields

In the Barnwell district, southern Alberta, W. Maughan of Lethbridge is drilling structure tests for the Cole-English Syndicate, which some time ago abandoned its deep test at Taber but still holds extensive acreage in southern Alberta.

On the Spring Coulee structure, Alberta Pacific Consolidated's No. 1, Section 15-4-23w4, is drilling around 2,405 feet.

In the Milk River district, Commonwealth Petroleums' No. 1, LSD 9, Section 9-3-15w4, is at 4,341 feet and waiting for casing. Capitol Oil & Gas Co.'s No. 1-A, LSD 16, Section 32-1-1w4, is working on casing at 3,520 feet.

In the Keho Lake district, Hudson's Bay Oil & Gas Co.'s No. 1 Keho, LSD 2, Section 17-11-22w4, is drilling at 1,125 feet. In the Eyremore district, Hudson's Bay's No. 2 Lommond, LSD 1, Section 26-17-18w4, is drilling at 3,920 feet.

On the Montana side, Sunburst-Rio Grande-McLaren's No. 1, on the Pinhorn structure in the Sweetgrass Hills, has drilled through the Colorado shale and is setting 8-inch casing on top of the Dakota sand preparatory to drilling in and testing production.

Ribstone Field

In the Ribstone Field, East Central Alberta, Meridian Oil's No. 3, LSD 4, Section 16-45-1w4, about 850 feet north of Meridian's No. 2 producer, has spudded in. Imperial Oil's No. 2 Ribstone, LSD 14, Section 9-45-1w4, is bailing and testing production at 1,684 feet. Ribstone Oils, Ltd., has No. 1 test, LSD 1, Section 1-46-1w4, standing at 2,056 feet, and No. 2, LSD 5, Section 25-46-1w4, standing at 3,230 feet; it is reported these will be plugged back and tested in the upper horizon where some oil shows were encountered. It is understood that a small refining plant will be built at McLaughlin, about 30 miles south of Lloydminster, to handle the Ribstone crude.

Orville Oil & Gas Co.'s No. 1, LSD 15, Section 10-46-2w4, is at 2,297 feet and reaming. London-Ribstone Oils' No. 2, LSD 5, Section 22-43-3 w4,is reported drilling at 2,107 feet.

Wainwright Field

In the Wainwright Field, Onalta Oils' No. 1, LSD 8, Section 20-45-6w4, is at 2,228 feet and running tubing preparatory to putting the well on the pump for steady production. It looks like a fairly large producer of heavy crude. Two other tests will be drilled. Edalta Oils' No. 1, LSD 15, 19-45-6w4, is in the oil sand at 2,217 feet and waiting for casing. When this has been cemented a production test will be made. Senator Oil & Gas Development Co.'s No. 1, E half, Section 23-44-6w4, is reported resuming at 50 feet.

On Paint Earth Creek, Hudson's Bay Oil & Gas Co.'s No. 1, LSD 5, Section 27-39-15w4, is drilling below 200 feet.

On the Duvernay structure north of Edmonton, Alberta Pacific Consolidated's No. 1, LSD 5, Section 34-55-12w4, is at 2,010 feet and drilling.

A new potential field in the Meeting Creek Valley, near Donalda, will be tested by a Vancouver syndicate which is reported to have arranged for extensive core drilling. The structure is located between Forestburg and Donalda, some distance north of the Sullivan Lake area where extensive filing was recently done by the Alberta Pacific Consolidated and Canadian Exploration Co. interests.

Hudson's Bay Oil & Gas Co. is reported doing some core drilling on a 25-mile-square block near Travers, Alberta.

Drilling in Far North

C. C. Ross, supervisory engineer of the department of the interior, returned to Calgary recently from an airplane trip to the far north. Among other developments he reports that drilling for oil is being carried on in the Great Slave Lake area at a point about 15 miles above the mouth of Hay River. The work is under the direction of Doctor O'Neill of McGill University, and is being backed by companies interested in northern copper deposits, their aim being to utilize the crude as fuel oil for smelting operations.

In the province of British Columbia, a test by the International Pipe Lines, Ltd., at Steveston near Vancouver, is reported to have encountered a fair gas flow at around 1,000 feet depth. The test is on acreage acquired by the Victor J. Freeman Syndicate. The strike was made in the old Monarch well, drilled some years ago, which was cleaned out and deepened a few feet when the gas flow was encountered. The Freeman interests hold some 20,000 acres in the vicinity of Steveston and Boundary Bay and more than 200,000 acres in the Quesnel Section of the Cariboo district.

On the Sumas Prairie structure, Sumas Gas & Oil Co.'s No. 2 rotary test is reported drilling close to the gas horizon at 700 feet, and will probably change to cable tools to drill into production.

In the Sage Creek district, Crow's Nest-Glacier Oil Co.'s No. 1, at 3,260 feet, is drilling through the bridge at the bottom of the hole.

CALIFORNIA FIELDS

(Continued from Page 64)

tomed at 3,983 feet and finished with a 5¾-inch liner carrying 440 feet of perforated.

The Belridge Oil Co. is redrilling and deepening its No. 15, a deep test in the North Belridge Field of Kern County, and its present status at 5,150 feet indicates that it will bear watching. This well was given a production test a short time ago but it failed to come up to expectations due possibly because of insufficient penetration in the oil-bearing formation. Another few hundred feet of hole, however, may transform this small 50-bbl. pumper into a substantial flowing well if this area is in any way comparable with the north dome at Kettleman Hills. Producing wells at Kettleman Hills have taken on an average of about 500 feet of Temblor before completion and it is thought that a similar penetration in the Temblor at North Belridge might prove equally as productive. The Belridge Oil Co.'s No. 15, located in the latter field, shows an unusually heavy gas pressure and the company is using 110-pound baroid in order to keep the well under control.

The Shell Oil Co.'s No. 1 Porter Day, a wildcat located in the Weed Patch area of Kern County, will be given another chance to make a bid for production at 5,029 feet and the outcome of this test will be watched with interest because of the unusually good showing encountered just below the 5,000-foot level following a series of minor showings just above this point. This well is one of the best looking wildcats under way in the San Joaquin Valley at the present time and it would not be at all surprising if the Shell succeeded in opening up a new field in the Weed Patch area, which is located in the extreme southeastern part of Kern County. Drilling operations should determine the potentiality of the Terra Bella district of Tulare County within the next few weeks as there are six wells under way in this region at the present time. The Terra Bella Oil Co. focused the attention of operations on this area, located a few miles from the town of Porterville, a few weeks ago when its test well was brought in pumping approximately 25 bbls. per day from about 900 feet. The output of this well showed a cut of approximately 25 per cent and it remains to be seen whether adjacent projects can shut off this water sand.

Kettleman Hills

The Department of the Interior has authorized the granting of a lease to Bolsa Chica Oil Corp. covering its 1,840-acre Ferguson permit on the North Dome of the Kettleman Hills Field of Kings County, according to a telegram received this week by the company from its attorneys in Washington. The company was also advised that the United States Geological Survey has decided that Bolsa Chica's No. 1 Ferguson on the North Dome is in the Temblor producing horizon. This decision assures Bolsa its prorata share of 25 per cent of the proceeds from the four wells now producing on the North Dome. These four wells are owned by Milham Exploration Co., Continental Oil Co. and Standard Oil Co. of California, the latter owning two. Under terms of the North Dome agreement between the oil operators and the Government, one-fourth of the oil produced by these four wells is distributed to operators having shut-in wells to compensate for oil drained from their holdings. Bolsa Chica's No. 1 Ferguson is standing plugged after having made discovery of oil last March to the satisfaction of the Department of the Interior. When the Bolsa Chica Oil Co. discovered oil in its Ferguson well, other landholders in the field raised the question as to whether Bolsa Chica's well was in the Temblor producing horizon or in another productive zone not covered by the curtailment agreement. The decision of the United States Geological Survey officially places Bolsa Chica in the Temblor zone and entitles the company to all the advantages accruing to members of the North Dome curtailment pact. The Continental Oil Co. has decided to drill a new well in Section 2-22-17 in the North Dome at Kettleman Hills and spud should be made on this project in the very near future. The Secretary of Interior recently granted the Continental Oil Co. permission to drill three new wells in order to protect its acreage from drainage due to production activities on adjoining fee-owned acreage but the company will only start one well at the present time because of the fact that the department is withholding permission to produce any new wells finished in compliance with this order. The new well to be started by the Continental will be a direct offset to No. 1 Felix of the Petroleum Securities, which well, located in Section 35-21-17, is producing 790 bbls. of 60.1 gravity oil and 25,000,000 feet of natural gas per day. The Pacific Western Oil Co. is making preparations to spud in a new well in Section 1-22-17 and this project should begin making hole in the very near future. No. 1 Whepley of the Associated in Section 35-21-17 and the Superior's No. 1 Huffman in Section 29-21-17, two wells located on fee-owned acreage, are rapidly approaching the critical point as the former is down 7,900 feet, while the latter is rotating ahead at 7,890 feet.

MICHIGAN FIELDS

(Continued from Page 64)

proctically completed the former E. L. Robinson's No. 3 Flentje, SE NE, Section 9-10n-16w, Muskegon Township, as a 5-bbl. initial producer in the lower Traverse pay sands. Pay sands were struck at 1,890-93 feet, the bottom of the hole. The nearby No. 1 McDermott, of the Section Ten Oil Co., also is being drilled into the lower Traverse formation by the Reed Oil Co. at about 1,840 feet. It is located in the SW SW, Section 10-1n-16w, Muskegon Township.

The Blue Arrow Petroleum Co.'s No. 1 Workman, SW NE, Section 8-10n-16w, Muskegon Township, on the river flats, was dry, or practically so, in the lower Traverse formation and is being drilled down to the Dundee pay sands. It is located between two lower Traverse gassers.

Four Muskegon County wildcats, two of which are listed in the new permits issued during the past week, are drilling. This is greater wildcat activity than the county has seen for nearly a year. They include the Jersey Oil Co.'s No. 1 Muskegon Brewing Co., NE SE NE, Section 17-10n-17w, Laketon Township, near the State park, and the White River Oil Corp.'s No. 4 on the William Lipka property, NE SE, Section 19-12n-17w, Montague Township. Both companies have started operations. Other new permits of the week were: Pure Oil Co.'s No. 1 Burrows and others, NE NE SE, Section 3-14n-3w, Chippewa Township, Isabella County; Gibson, Johnson & Borden, Inc.'s No. 1 Peter Mahon, SE SE, Section 24-15n-4w, Isabella Township, Isabella County; and the Ohio Producing & Refining Co.'s No. 1 Wezensky, SW SW, Section 19-15n-3w, Denver Township.

Two wildcat wells in the Mt. Pleasant area were plugged and abandoned during the week. The West Virginia Oil Producing Co.'s No. 1 J. Roethlisbery, SW NE, Section 24-13n-4w, Lincoln Township, Isabella County, was dry and was plugged in the Dundee formation at 3,699 feet. The Wittmer Oil & Gas Properties also abandoned its No. 1 Zimmerman, SE NE, Section 8-10n-1w, Hamilton Township, Gratiot County, at a total depth of 1,140 feet, where it was plugged.

Wildcat Operations

Six Western Michigan wildcat wells are drilling in four counties near Muskegon, with prospects that two or may be three may be completed in the near future.

The Atlantic Exploration Co.'s No. 1 Brydges, NW SW, Section 12-11n-3w, Ashland Township, Newaygo County, has been plugged back from a total depth of 5,663 feet to 5,323 feet, where a show of oil was encountered. The company has started a second well north of the village of Grant.

The Newaygo Gas & Oil Co.'s No. 1 A. J. Bates, NE SE, Section 12-13n-13w, Sherman Township, Newaygo County, is drilling ahead at about 4,900 feet with no success as yet.

The only active wildcat well in Oceana County is the Red Rock Oil Co.'s No. 1 Skidmore,, located SW NE, Section 19-15n-18w, Golden Township, and it is drilling at about 800 feet with no show of oil or gas. It may not be drilled much deeper.

Lake County

Fred J. Estes and others will plug their No. 1 W. L. Kellogg estate, located NW NW, Section 11-20n-11w, Dover Township, Lake County, which has been shut down at 2,801 feet since last fall. It was dry at this depth.

Mason County

M. I. Diamond, independent operator in western Michigan, is about ready to drill in his No. 2 Diamond, SW SW NW, Section 15-20n-17w, Grant Township, Mason County. No. 1 Diamond, on the same property, made more than 2,000,000 cubic feet of gas a day initial flow, in the drift at 728 feet. Gas for drilling the second well comes from the No. 1 well.

Allegan County

Formations are running from 25 to 29 feet higher in H. P. Manion's No. 2 Tobin, SE NW SE, Section 16-2n-13w, Allegan Township, than in nearby wells drilled about 18 years ago in Allegan County, according to Mr. Manion. The Tobin well is about 800 feet deep.

JAMES H. SNOWDEN DEAD

James Hastings Snowden, vice president and general manager of the Snowden & McSweeney Co., which holds oil properties in Texas, New Mexico, Arkansas, Kansas, Oklahoma and Louisiana, died in his home in New York recently. Mr. Snowden spent much time in Texas and was well known in that State. He was vice president of the United Potash Co., which operates potash mines in New Mexico, and was one of the earliest independent oil operators.

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Consumption in Chicago Area Is Good

Large Part of Gasoline Movement Is on Contract With Spot Business Light. Tendency to Cut Prices Continues

By John B. Waldo

CHICAGO, Aug. 11.—The consumption of gasoline over this territory continues very good and the movement from the refineries is large. The major part of the sales are on contract so that the spot business is running light. This is unfortunate in some ways, for the tendency on the part of sellers who are seeking the spot orders is to offer more tempting prices which reduces the level of even the contract business, which is so often based on the published quotations of certain trade reports whose prices are those of the spot market. Reports made by salesmen who were in for the week-end indicated that conditions in the country districts were none too favorable.

Stocks of gasoline are low in jobbers' tanks, but it is further stated that the jobbers have no present intention of increasing these stocks, one reason being that there is a very general expectation in the country of a tank wagon decline. As to prices at the stations, all reported that price cuts were numerous, some even stating that in some of the smaller towns there were more pumps at a cut price than were holding for the normal market for that town. Major refiners are still holding their former spot price of 6½ or 7 cents, but the open market spot price is ranging from 5¾ to 6 cents, with many low quotations found in both differential and regular territory. Rumors of very much lower prices than have been named are very common, but they are not confirmed.

There was little or no demand for the higher gravities. Antiknock gasoline was a good seller and refiners reported that they were still making contracts with jobbers for Ethyl Gasoline. Some salesmen state that the only jobbers in some towns who were holding their prices were those who sold Ethyl Gasoline.

Kerosene was quiet with refiners quoting 3 cents and some buyers offering to take some quantity at 2¾ cents. Furnace oils were in light spot demand. There was a listless market for the heavy industrial fuel oils. Lubricating oils were hard to move today and the market for refinery stocks was dull with easy prices reported by users whose orders were sought by the refiners.

Improvement Comes Late

There has been a general discussion of the tank wagon price situation in this territory and the general opinion is that the statistical position of the industry is much improved and will be further improved, yet the improvement has come so late and is being manifested so slowly that the conditions in the country are growing steadily worse. Price cutting is on the increase and on a large and almost organized scale. There are several influences at work to maintain prices, one of them being the Code of Trade Practices and the other the Ethyl Gasoline contracts. These have helped to maintain the normal tank wagon rates. The spread is too wide between the cost of the gasoline delivered at the jobbers' station and the service station price to the motorist. This spread can be narrowed only in two ways, by advancing the refinery market or reducing the prices to the public. The former is the one that should be chosen, for the present prices of gasoline in the central states do not permit the refiner to make a real profit if he can make any profit at all. Some refiners state that they are losing money at the refinery but that their stations are putting them out of the red by a narrow margin. Others have some fortunate production profits to make good refinery losses.

Labor Day this year comes on September 1, and this means that the trade has left only three weeks more of real touring conditions. With the opening of the schools after Labor Day long trips are impossible in most families and besides the evenings are growing too short for much after dinner driving. Stocks of gasoline have been reduced steadily but are still too large. They may come down to a possible 40,000,000 bbls. by the first of next month, but it seems hardly possible that there will be a reduction to 30,000,000 bbls. by October 1 as has been suggested by some. Buying is light in the spot market. Contract buyers have ordered out pretty freely for August, but right now there is a sort of slackening in their instructions. Several jobbers, each operating several stations, although they do not call themselves large jobbers, have stated that their June business was less than that of a year ago. In this State the new gasoline tax went into effect on August 1, last year, and there was a good deal of buying in anticipation of the increase in price by both the public and the commercial buyers so that business in the last week in July was unusually heavy. These jobbers have said that they did not consider that their business was really behind that of July, 1929, although the actual number of gallons of gasoline distributed was less by a small percentage. These jobbers operated the same number of stations in July, 1930, as in July, 1929.

Increased Gallonage Reported

Some of the major companies which report a consistent increase in their gallonage over last year are obtaining this result simply because of the greater number of outlets. New stations are being added as rapidly as at any time in the history of these companies and at the same time with possibly the one exception of the Standard Oil group, they have added to the number of owned stations by purchase. The result is that comparisons of the quantity of material sold are misleading just as are the reports of gasoline consumption during the spring months when the reports are based on the inspection fees paid and taxes collected.

In this territory gasoline consumption since the beginning of the year has been only a little better than that of a year ago. The result is seen in such keen competition that a sales manager for one of the major companies said last week that his business was to buy accounts rather than to sell gasoline. Take it in the Ethyl Gasoline proposition; a year ago it was easy to get contracts with jobbers on a 3-cent premium, but today there are so many offering Ethyl Gasoline that the rule is fast becoming to charge the minimum premium allowable under the refiner's contract with the makers of Ethyl fluid, which is 2½ cents. Some refiners have stated that when the white gasoline with which the Ethyl fluid was blended was of such a nature as to require the full 3 cc. per gallon there was no money in the blending. However, as the price is based on the normal price for white gasoline, a higher market for the white gasoline would help the situation. At the present time the profit is all in the premium paid.

Few Price Changes

There was little change in prices during the week. As a general rule the usual price asked for U. S. Motor Gasoline was 5¾ cents on a Group 3 basis. This price ruled in practically all of the states in the territory with the exception of Michigan, where the price was apparently anything the buyer might offer. One of the local refiners was openly quoting 5½ cents in Michigan and Ohio and others of the local group were meeting this price, while some of the Michigan refiners were selling at less. Jobbers in Michigan stated that they could buy at 8¼ to 8½ cents delivered. The last order of the Detroit municipality went at .0833 cents, delivered at Detroit, and was taken by the White Star Refining Co., the next lowest bid being that of the Fisher Industries, Inc., at .0835 cents. Natural gasoline has been firmer and the price range is around 5 cents for any grade. Blending naphthas have been a little easier. There continues to be some demand for these naphthas locally and in the territory.

There is no real activity in kerosene and the prices lack strength. Jobbers report that they are able to buy a good 41-43 water white kerosene 3 cents, Group 3, from one of several reliable refiners. Other refiners are quoting 4¼ cents. Some sellers state that some of their customers are buying kerosene in place of distillate, asserting that they can compete with the better grades of special furnace oils with kerosene, which at 3 cents is just as low in price as a good prime white distillate. At least one refiner is figuring on trying to work off a stock of kerosene, which is moving very slowly, by blending the kerosene with gas oil to make a special furnace oil of the distallate type. There is apparently a little more kerosene moving than there was a few weeks ago. There seems to be no prospect of any increase of consequence in the consumption until the tractor season comes around again and a good distillate or gasoline is preferred by many tractor users. Some tractor owners are said to start with gasoline and then fill the tank with distillate. Others are said to blend a small percentage of gasoline with the distillate for cooler weather driving.

Furnace Oils

In the furnace oil class the immediate business consists of a limited number of single car orders for various kinds of oil ranging from distillate down to the lighter fuel oils. There has been no change in the prices asked on this kind of business. Some sales have been made for larger quantities to go into storage, shipment on which can be made at the refiners' option during the current month. These orders are for the most part 5 or 10-car orders.

Contracts continue to be made by distributors for their requirements for the coming season and so far as can be learned they are on exactly the same basis as those made three months ago, that is, the prices are based on the average of certain published prices at the time of shipment with a minimum and maximum price. Right now the market price is lower than the minimum prices named in some of these contracts. This is believed to be a temporary condition and it is expected that the prices for all grades of furnace oil will advance with the approach of cold weather and the beginning of the season of home heating.

The U.G.I. gas oil or straightrun gas oil generally is rather steadily held by refiners at 2 cents, Group 3, for the full specification article. There is some material that is not full 32-36 oil and some that has a higher sulphur content than is allowable under the specifications, which can be bought for a little less, but real U.G.I. gas oil is held firmly at 2 cents to buy and 2⅛ cents to sell in quantities or to the larger users whatever their present taking.

Business in Small Quantities

Occasionally some buyer of gas oil will give a really substantial order but for the most part the business continues to come along in small quantities considering the size of the buyers, and the quantity of gas oil that is used during the course of the year. Usually some of them are storing oil at this time but so far there has been little of this.

The regular specifications for the U.G.I. gas oil call for not more than one-half of 1 per cent sulphur, but the gas company buyers are not insisting on this part of their specifications and have not for some time, three-fourths of 1 per cent and even a full 1 per cent being taken in and used with no objections so long as the oil is satisfactory in use. Zero gas oils are only slightly active at present. Their usefulness comes with the opening of the season of home heating.

Occasionally sales are made to some industry which simply wants an oil for burning with no special requirements mentioned. Straw zero gas oil is already rather well under contract but offerings of amber and dark gas oil are plentiful and prices range from 2⅜ to 2⅝ cents, according to color and quality, with some premium oil being held for a little higher price.

Heavy Industrial Fuel Oils Quiet

Heavy industrial fuel oils are quiet with little improvement in the demand as yet resulting from the resumption of work by a number of plants, including several of the automobile companies. There is a good deal of looking toward the future and preparing for it. In line with the planning for the future, there have been extensive sales of liquid asphaltum, so called, by one of the central state refining companies to several of the tank car distributors in this market. According to one of the purchasers, the oil is a 16-20 gravity, low cold test and a nice, clean oil desirable for fuel oil. The price paid was according to one of those who bought last week, .0225 cents, refinery, and the freight at the regular rate would be .0105 cents. This would not be in line with an 18-22 fuel oil out of Group 3, but as liquid asphalt it takes the road oil price and makes a saving estimated at 17 cents a barrel, which rate gives it an opportunity to be sold in this market at about the cost of an equal value in an Oklahoma fuel oil, and net the refiner close to 95 instead of 50 cents a barrel.

As least two of the nearby refiners have stocks of a heavy fuel oil, about a 4° to 8° gravity, which they would like to move and on which they have quoted low prices, and salesmen who handle fuel oil would be glad to undertake the sale of the material provided they could think of some users. Where an extra hot fire is wanted this oil will make the fire, for it is rich in heat units. Some plants are now using the oil, but the number is too small to prevent accumulation of the heavy oil. Some rough figures made indicated that the price of the heavy oil to the users would be less than 40 cents a barrel, Group 3, and contracts could be made at the prices quoted over the winter or the year.

Firm Market in Zero Oils Expected

There has been little recent change in heavy industrial oils. The demand is light and there is cutting of prices and close figuring for business. The trade still believes that a little later, when the real consumption begins, there will be a firm market for the zero oils. The industrial plants in this section must run and they will use material. They must find business and make the prices which will bring them the orders even if they have to work for the first few months on a very narrow margin.

The demand for lubricating oils is light. There is some sale of motor oils, although the country jobbers are not buying any more motor oils than they will need in a brief time. The demand for industrial oils is light. Refinery stocks are quiet. Western bright stocks are freely quoted in this market at 25

(Continued on Page 136)

Easier Undertone in Eastern Gasoline

Mixed Sentiment Prevails, However. Fairly Steady Market in Other Refined Products, With Buyers Reluctant to Book Ahead

By A. E. Mockler

New York Bureau, The Oil and Gas Journal, Rooms 1919-21, No. 154 Nassau Street

NEW YORK, Aug. 11.—Mixed sentiment again prevails in the East Coast gasoline market this week, with the undertone a shade easier than during the preceding week, although no open market price revisions have developed. On the remainder of the refined products list a fairly steady market is in evidence, although underlying conditions are still a little shaky on some lines. Buyers are still reluctant to book ahead, and practically all trading is for prompt and nearby delivery.

Stocks of gasoline at the refiners are still declining, but the market nevertheless is still topheavy from a supply standpoint, and while currently the situation is a little better, operators are looking ahead to the winter months with some misgivings. When the normal seasonal slackening of demand sets in, they feel, the refining branch of the industry will be faced with the necessity of making further drastic cuts in production of refined products if further progress is to be made toward restoring the industry's equilibrium.

Rumors of an impending reduction in posted prices for gasoline at the Gulf have been instrumental in making for a slackening off in export buying interest. While these rumors have been in existence for some weeks past, it is evident that the current reports have more foundation than previous news to the same effect, and well-posted operators are looking for an early cut in the Gulf basis.

Volume of gasoline sales continues to increase in East Coast territory, but the price basis is still far from stable and price cutting is more or less rampant in the retail field, with both established brands and the less known products sharing in the price competition.

Refinery Gasoline

The posted price for U. S. Motor is still held at 9 cents per gallon at the refineries, in tank car lots, but off-priced offerings, which had been on the decline during the previous week, have again become more numerous. Sales of U. S. Motor at 8½ cents per gallon in tank car lots at the refinery are of frequent occurrence, and in the barge market, quotations are sharply under this level, with a large transaction reported to have been made this week on the basis of 7½ cents per gallon at marine terminal in New York harbor.

A cargo of U. S. Motor was reported to have been sold out of the Gulf this week at 7⅜ cents per gallon, laid down at New York, which is far from a steadying influence. California gasoline can be laid down at New York at an attractive price level, but the large integrated companies through their control of much of the available intercoastal tanker tonnage, have succeeded in holding most of the California movement within their own ranks, and outside transactions have been of infrequent occurrence.

East Coast refiners are understood to be adhering to their curtailment plans, put into effect July 1, but the industry in this area cannot reflect the full benefits of this development, owing to the continued movement of South American, California, and United States Gulf gasolines into Atlantic seaboard territory.

Premium fuels are holding steady at the refineries, but the retail end of the business is not in such satisfactory position, and numerous instances of price shading on premium quality fuels are in evidence.

Tank Wagon Gasoline

There have been no changes in posted prices in the territory, but the basis is still disturbed by the price cutting, "courtesy cards," and other competitive practices of some marketers which is making for a general cut of 2 cents per gallon under posted schedules on many sales at retail.

Gallonage in this area has been exceptionally heavy during the week under review, and sales of principal marketers in this area are running at record peaks. Due to the increasing competition in this territory, however there are more of the major factors sharing in this increase, and the established interests here have not benefitted as fully from the growing consumption as would otherwise be the case.

With the refinery market still in an unsettled position, no possibility of any early mark-up in tank wagon and service station prices is held out by well-posted interests here, notwithstanding the steady gains in volume as the summer season progresses.

Kerosene

A soft market is in evidence on this product. The posted price is unchanged at 6¾ cents per gallon for 41-43 water white at refineries, but this quotation is not being maintained on all sales, and some price shading is being done, with business at 6½ cents and down to 6¼ cents per gallon in some instances. Stocks are fairly large and consumption is seasonably light.

The tank wagon kerosene market has been a dull affair throughout the week under review. A moderate movement is reported, with quotations unchanged in all sections of Atlantic Coast territory.

Lubs

While the market for cylinder stocks has steadied in the field, the local market is still in an unsettled position, and subject to some shading. Large interests which accumulated considerable oil at recent low levels have been jobbing out these stocks locally at price levels under the parity of the field prices, and as a result of this situation, there has been relatively little buying during the week for refinery shipment.

There were a number of large export transactions put through during the recent bad break in Pennsylvania cylinder oil prices, and these deals are just coming to light with the movement of the actual oil into export channels.

Advices from the field this week indicate that a number of lub oil refiners have curtailed operations to the point where they are just running their plants at sufficient capacity to keep their organization intact. This development should react to the advantage of the market later on in the year.

Red and pale oils were again uneventful this week, demand holding up fairly well and quotations remaining unchanged.

Fuel Oil

Sales are holding up fairly well in the marine end of the business and refiners continue to quote the market at $1.15 per barrel in bulk at marine and refinery terminals, with the usual differentials for barging alongside within the harbor limits.

Stocks of fuel oil remain fairly heavy, and the market, from a statistical standpoint, is still rather easy. Most of the surplus holdings of bunker oil, however, are concentrated at points outside of the East Coast area, and principal refiners here are having little difficulty in maintaining the market at the posted level.

Diesel Oil

Contract withdrawals of Diesel oil are holding up in good volume and the market is steady to firm at $2.00 per barrel bulk, at refinery terminals, East Coast points. Business continues to run at levels substantially in excess of those for the comparable months of 1929.

Refiners are confident that Diesel oil will hold its present favorable position for the balance of the year, and there is still a possibility that the market may go to a higher price level before the close of 1930. Many of existing marine contracts were made at a minimum of $2.00 per barrel for the year and a maximum of $2.10, and in some quarters it is said that the latter level may yet be attained.

Domestic sales of Diesel oil, while not comparable in volume to those for the marine end of the business, are nevertheless steadily gaining. Most of the domestic business, however, is in the spot market.

Gas Oil

With the large manufactured gas companies drawing stocks of gas oil in but limited volume, the market position is still weak. There is plenty of gas oil available in East Coast territory, and California stocks are arriving in fair volume, with a large quantity of the California product available for shipment East at prices which figure out less than the market in this area.

The fall season is expected to witness a definite improvement in the gas oil market. The end of daylight saving normally witnesses an appreciable increase in gas oil consumption by the gas manufacturing companies, and the increase this year is expected to be of record proportions, owing to the growth in the use of manufactured gas for domestic heating purposes. Consolidated Gas Co. of New York has announced a new schedule of rates lowering the cost of gas for domestic heating, and installations of gas furnaces in the metropolitan New York area are reported to have shown an appreciable increase.

Wax

Buying interest in paraffin wax has eased off a little this week with the market marking time. Spot 130-132 a.m.p. is up an eighth at 5⅝ cents per pound, but with this exception the market is unchanged. The higher melting points are steady to firm, but the lower melting points the market is less steady, and it is probable that quotations could be shaded fractionally on a firm bid.

Domestic wax consumers continue to operate on a hand-to-mouth basis and are carrying but limited stocks.

In the export division of the wax market, England and South America are inquiring for stocks in slightly better volume.

Internal disturbances in China, normally a large buyer of American paraffin wax, have materially curtailed consumption of wax in that country, with no hope for improvement in the near future held out.

Gulf Export Market

Reports of an impending reduction in posted prices at the Gulf have slowed down the market and there were no cargo fixtures this week. Cables from abroad state that American companies have given their foreign buyers strong intimations that the price of 64-66 at the Gulf will be reduced by 1 cent per gallon "within the next few days" and that corresponding reductions will be put into effect on other grades. This was denied by several members of the association, however.

Thus far there has been no confirmation of any pending price cut by the association, but export buyers are nevertheless holding off the market pending further developments in the situation.

The Gulf export market for kerosene, lub oils, and fuel oil has been rather uneventful throughout the week, with small-lot purchases predominating.

California is reported to be booking a substantial export business on gasoline, but this is being handled by the California companies direct, and little open market trading is reported. Offerings of low-priced California gasoline for shipment East are rather light, and the market is quiet due to the difficulty in getting bottoms to move the oil.

There were no developments of general interest in the Venezuelan situation during the week. Little Venezuelan crude is available in the open market, and producers are showing firm price views. The Mexican market is likewise quiet, although showing less strength than is true of the Venezuelan product. Mexican heavy crude with high asphalt content, is moving out well against term contracts booked earlier in the year.

Reports from European markets indicate that Russian and Rumanian products are furnishing stiff competition for American refined oils in many consuming centers.

Petroleum Exports

Export movement of refined petroleum products from New York for the week ended August 2, showed some improvement over the preceding week, and business was showing further signs of impending gains. Buyers were showing more interest in offering for nearby deliveries, and it appeared likely that considerable additional business would result from the inquiries now coming in.

Foreign buyers, however, are still watching the price situation rather closely, and should the market fail to continue the better feeling which developed with the turn of the month, the outlook indicates another slump in buying.

The following table shows principal exports of refined petroleum products from New York for the past three weeks (all figures in gallons unless otherwise noted):

	Week ended		
	Aug. 2	July 26	July 19
Gasoline	115,000	130,000	590,000
Naphtha	.....	.....	3,060,000
Kerosene	280,000	42,000	25,000
Fuel oil	110,000	10,000	936,000
Lubricating oil	2,920,000	1,345,000	4,505,000
Petroleum, refined	875,000	200,000	1,150,000
	Lbs.	Lbs.	Lbs.
Petrolatum	3,000	7,000	5,000
Paraffin wax	840,000	1,200,000	950,000
Refined	.....	200,000	25,000
Scale	1,225,000	100,000	330,000
Lub. grease	875,000	675,000	940,000

Local operators who normally carry fair-sized stocks of refined products for spot trading in the export market are now carrying but limited holdings of all products, it is reported. Not only have these buyers curtailed their holdings, but few of them have any definite position, either long or short, in the market for nearby deliveries of the products in which they specialize.

Imports

Imports of crude and refined oils at the principal United States ports for the week ended August 2 totaled 2,323,000 bbls., a daily average of 331,857 bbls,. compared with 2,053,000 bbls., a daily average of 293,285 bbls. for the previous week. Details follow:

	Bbls. of 42 gals.
At Atlantic Coast ports—	
Baltimore	402,000
New York	1,339,000
Philadelphia	265,000
Others	302,000
Total	2,308,000
Daily average	329,714
At Gulf Coast ports—	
New Orleans and Baton Rouge	15,000
Total	15,000
Daily average	2,143
At all United States ports—	
Total	2,323,000
Daily average	331,857

Distribution of total imports is as follows:

Crude	1,428,000
Gasoline	340,000
Fuel oil	555,000

California Oil Receipts

Receipts of California crude and refined petroleum at Atlantic and Gulf

Coast ports for the week ended August 2 totaled 786,000 bbls., a daily average of 112,286 bbls., compared with 443,000 bbls., a daily average of 63,286 bbls., for the week ended July 26. Details follow:

	Bbls. of 42 gals.
At Atlantic Coast ports—	
Boston	48,000
New York	339,000
Philadelphia	232,000
Others	167,000
Total	786,000
Daily average	112,286
At Gulf Coast ports—	
All ports	.....
At Atlantic and Gulf Coast ports—	
Total	786,000
Daily average	112,286

Distribution of total California oil receipts is as follows:

Gasoline	686,000
Fuel oil	92,000
Lubricants	8,000

Shipments of refined products from California for East Coast ports during the week included the following (ownership of tanker moving the oil given where such owner of record is an oil company:

To New York: 77,500 bbls. of distillate on the Astral (Standard Transportation Co.—S.O.N.Y.); 67,000 bbls. of gasoline on the W. H. Tilford (Standard Shipping Co.—Standard Oil Co. of New Jersey); 79,700 bbls. of gasoline on the Agwiwold; 80,000 bbls. of gasoline on the Dilworth; 64,700 bbls. of Diesel oil on the Eagle (Standard Transportation Co.—S.O.N.Y.); 69,700 bbls. of fuel oil on the Trimountain.

To Wilmington, Del.: 90,000 bbls. of gas oil on the Livingston (Standard Shipping Co.—Standard Oil Co. of New Jersey).

To Everett, Mass.: 69,800 bbls. of gasoline on the Oregon.

In addition to the foregoing, a cargo of 51,500 bbls. of gas oil was shipped on the Chiloil for United States Atlantic ports, north of Hatteras, destination at shippers' option.

KANSAS FIELDS

(Continued from Page 52)

NW NW, Section 23-23-5, is a rig on ground. Richmond Drilling Co.'s No. 2 McLean, NW cor. NE NE, Section 17-27-6, has been completed for 15 bbls. at 3,133 feet after plugging back from 3,135 feet.

Coffey County

Linn Oil & Gas Co.'s No. 3 Barngrover, SW cor. NE NW, Section 7-23-15, is a rig on ground. McGregory and others' has the rig up for No. 1 Wood, NE cor. NW SW, Section 20-22-15.

Cowley County

Empire Oil & Refining Co. and other's No. 1-B Hill, SE cor. SW NW, Section 20-31-6, has been completed for 70 bbls. in sand at 2,910-19 feet.

Greenwood County

Simmons and others' No. 1-B Greenwood, SW cor. NW SE, Section 19-22-11, is a rig. No. 3 Greenwood, NE cor. SE SW, Section 19-22-11, is a rig. Empire Oil & Refining Co. is building rig for No. 3 Greenwood, NW cor. SW SE, Section 19-22-11. Aladdin Petroleum Co.'s No. 1 Burgan, NE cor. NW, Section 26-22-11, has been abandoned at 2,110 feet. O'Neil and others' No. 2 Harlan, SE cor. NW NW, Section 34-22-11, made 150 bbls. in sand at 1,856-1,900 feet. Empire Oil & Refining Co.'s No. 10 Patterson "C", SE cor. SW SE, Section 36-23-11, has been completed for 200 bbls. in sand at 1,731-1,802 feet. No. 4 Nesbit, NW cor. NW, Section 6-24-15, made 150 bbls. in sand at 1,752-96 feet, total depth 1,801 feet.

McPherson County

Sinclair Oil & Gas Co.'s No. 5 McCurdy, NE cor. SE, Section 33-20-3w, is rigging up rotary. Gypsy Oil Co.'s No. 1 Stucky, SE cor. NE, Section 33-20-3w, is rigging up rotary. No. 1 Kinney, NE cor. NW SW, Section 34-20-3w, is an old well preparing to deepen from 3,102 feet. No. 4 Kinney, NW cor. SW, Section 34-20-3w, is rigging up rotary. Sinclair Oil & Gas Co.'s No. 4 McCurdy, NE cor. SE SE, Section 33-20-3w, made 895 bbls. in sand at 3,269-92 feet, total depth 3,316 feet.

Rice County

Hipple & Rogers' No. 1 Rainet, NE cor. NW SE, Section 3-21-6w, is a rig on ground. Independent and Hershey's No. 1 Jensen, NE cor. SW NW, Section 32-18-8w, has been abandoned at 3,530 feet. Danciger and others' No. 1 Bell, C SW, Section 16-19-8w, has been abandoned at 3,705 feet.

Sedgwick County

Derby Oil Co.'s No. 3 Gorham, NW cor. SW, Section 6-26-1, is an old well preparing to deepen from 3,374½ feet. Graham Brothers' No. 1 Dennison, NE cor. NE, Section 25-27-1, is a rig. Shell Petroleum Corp.'s No. 1 Morris, SE cor. SE, Section 10-26-2, is an old well drilled deeper and has been completed for 76 bbls. in lime at 3,180-81 feet. Wixson & Spencer's No. 1 Rounds, SW cor. SE, Section 17-27-2, has been abandoned at 3,403 feet. Derby Oil Co.'s No. 1 Eastborough estate, SE cor. SW NE, Section 19-27-2, made 800 bbls. in chat at 2,949-61 feet. Vickers Petroleum Co. and Hinkle's No. 1 Keys, NE cor. NW NE, Section 30-27-2, has been completed for 1,000 bbls. in sand at 3,238-42 feet.

Woods County

Spencer & Derby's No. 2 Gay "B," SW cor. NE NW, Section 29-23-15, is a rig.

REGISTERED IN ALBERTA

CHATHAM, Ontario, Aug. 11.—The Hope Engineering Co., which is planning extensive operations in the Canadian West, has obtained registration in Alberta under the Alberta Companies Act.

CONSUMPTION GOOD IN CHICAGO DISTRICT

(Continued from Page 134)

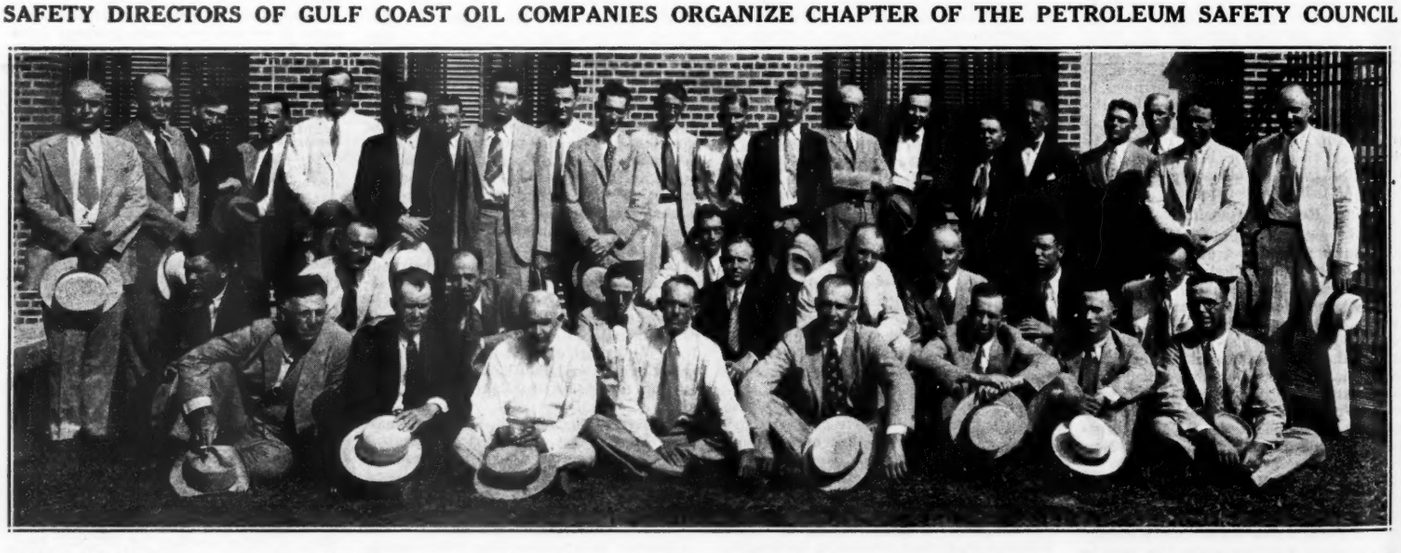
cents and Pennsylvania bright stocks at 23 cents, both prices being at the refinery.

Local conditions in the distributing end of the industry are not improving. Major refiners are paying 1 cent rentals instead of one-half cent as in the past. This is paid at the end of the month on the total quantity of gasoline sold. The major distributors are also paying all or part of the discounts under either the Triple A, the Q.D.A., or commercial accounts at the time of the sale. Some pay a part of the amount due and the rest at the end of the month. There is no uniformity in these payments and doubtless some jobbers get better terms than others. One jobber stated that he was now receiving 7 cents under the service station price on all gasoline purchased, of which 5 cents was on his Q.D.A., 1 cent was rental and the other cent was a special on account of some advertising privileges allowed to his source of supply. If this jobber does any business and keeps the money himself, instead of giving it to his customers in discounts and rebates, he should make some profits.

IMPORT DUTIES REDUCED

WASHINGTON, D. C., Aug. 11.—Reduction in import duties in Berlin on certain petroleum products is shown in a cable received from Acting Commercial Attache L. W. Hutt, Brussels, by the Department of Commerce. The import duties in Belgium are now reduced on the following petroleum products: Gasoline from 80 to 70 francs per 100 liters; lubricating oil and fuel oil from 10 francs per 100 kilos to free, the cable shows. At the same time an excise tax has been established on all gasoline refined in Belgium.

SAFETY DIRECTORS OF GULF COAST OIL COMPANIES ORGANIZE CHAPTER OF THE PETROLEUM SAFETY COUNCIL



HOUSTON, Tex., Aug. 9.—A Gulf Coast chapter of the Petroleum Safety Council was organized at a meeting of safety directors of Gulf Coast oil companies held in the rooms of the Humble Club in the Humble Building here. Officers elected are: R. B. Roaper, Humble Oil & Refining Co., Houston, president; J. L. Risinger, Magnolia Petroleum Co., Beaumont, Tex., vice president; P. E. Keegan, Shell Petroleum Corp., Houston, secretary-treasurer.

Organization of the chapter was under the sponsorship of the safety division of the Mid-Continent Oil and Gas Association, and the petroleum section of the National Safety Council. Representing the former at the meeting was D. J. Wallace, Tulsa, safety director of the association, and representing the National Safety Council was H. N. Blakeslee, Chicago, petroleum representative in the council.

Forty-one persons were registered at the meeting, of whom 26 are active in safety work of oil companies on the Gulf Coast. These represented producing, pipe line and refining companies. Among guests were C. F. Herbert, of the United States Bureau of Mines, Vincennes, Ind.; M. D. Gannon, Southern Crude Oil Purchasing Co., Fort Worth, Tex.; and George J. Gruber, Mine Safety Appliance Co.

An organization committee and a program committee were appointed by the new president. The former is composed of H. S. Stapleton, Vacuum Oil Co., Lake Charles, La.; J. L. Matteson, The Texas Company, Port Arthur, Tex.; and Charles Coleman, Gulf Refining Co., Port Arthur. On the program committee are C. L. Haush, Sinclair Refining Co., Houston; J. S. Welborn, Freeport Sulphur Co., Freeport; and Charles O. Crouch, Texas Pipe Line Co., Houston.

Regular meetings will be held by the chapter, the next to be at Port Arthur, September 5, when the safety men will be guests of The Texas Company and the Gulf Refining Co.

Those at the chapter organization meeting attended a banquet at the Rice Hotel at which approximately 150 oil men were present. Jack Dies, land and tax commissioner, Humble Oil & Refining Co., was toastmaster. Speakers included Mr. Blakeslee, Mr. Wallace and Mr. Risinger, vice president of the chapter. Their talks were on various phases of safety work.

Gulf Coast safety directors who attended the organization meeting of the chapter were: L. A. Bell, Vacuum Oil Co.; Charles B. Boone, Gulf Production Co.; D. E. Bruner, Crown Central Petroleum Corp.; J. R. Cleveland, Texas Pipe Line Co.; J. D. Coker, Shell Petroleum Corp.; Charles O. Crouch, Texas Pipe Line Co., all of Houston; Charles Coleman, Gulf Refining Co., Port Arthur; O. H. Eichelhuger, Vacuum Oil Co., Lake Charles, La.; Thomas E. Gibson and C. L. Haush, Sinclair Refining Co.; V. H. Hayslip, Humble Oil & Refining Co.; P. E. Keegan, Shell Petroleum Corp., of Houston.

T. J. Knapp and C. O. Lee, Freeport Sulphur Co., Freeport, Tex.; James L. Matteson, The Texas Company, Port Arthur, Tex.; R. S. Myers, Crown Central Petroleum Corp., Houston, Tex.; O. B. McLaughlin, Freeport Sulphur Co., Freeport; H. L. Rankin, Gulf Production Co.; R. B. Roaper, Humble Oil & Refining Co.; and H. J. Sheard, Crown Central Petroleum Corp., Houston; W. F. Spear, Humble Oil & Refining Co., Baytown, Tex.; H. S. Stapleton, Vacuum Oil Co., Lake Charles, La.; J. O. Traweek, The Texas Company, Port Arthur; J. S. Welborn, Freeport Sulphur Co., Freeport; R. C. Wilcox, Humble Oil & Refining Co., Baytown; and T. W. Ward, Houston.

Manufacture of Natural Gasoline

Gross Production Tax to Apply to Natural Gasoline

Casinghead gas is an oil within the meaning of Article 7071 of the Revised Civil Statutes of 1925, and is, therefore, subject to the gross production tax of 2 per cent, according to an opinion given by the Attorney General to State Auditor Moore Lynn. Mr. Lynn stated that statistics examined by the auditor's department indicate that the amount of taxes now due the State from this source is probably more than $2,500,000 and the tax is accruing at the rate of more than $350,000 per annum.

The gross production tax on oil was first imposed in 1907, the rate at that time being one-half of 1 per cent. In 1919, the rate was raised to 1½ per cent, and in 1923 the present law was enacted which imposes a tax of 2 per cent on the value of oil produced within the State of Texas.

The auditor stated that there has been a marked increase in production of casinghead gas since 1916, that being the earliest date for which statistics were examined. The production for 1916 was slightly more than $200,000, and that for 1928, was more than $18,000,000. It is believed that from 1916 down to the present date in 1930 the value of casinghead gas produced has been in excess of $150,000,000.

Taking into consideration the variations in the rate of the tax, there is reason to believe that the gross production tax now due the State on casinghead gas is in excess of two and one-half million dollars ($2,500,000), not including interest and penalties.

The opinion of the Attorney General follows:

Honorable Moore Lynn,
State Auditor,
Capitol Building,
Austin, Texas.

Dear Sir:

Your recent favor addressed to Attorney General Bobbitt, with reference to gross production tax on casinghead gas, has been referred to me for answer.

By this letter you request our opinion as to whether casinghead gas comes within the definition of oil produced or taken from the earth, as set forth in Article 7071, Revised Civil Statutes, 1925, and, therefore, subject to the gross production tax imposed by such Article, and further desire to know how to determine the value of such casinghead gas, if the casinghead gas is held to be subject to the tax imposed.

Section 1 of Article 7071 imposes an occupation tax upon all persons producing oil by taking it from the earth in this State, said tax to be in an amount equal to 2 per cent of the value of the total amount of oil so produced at the average market value during the quarter preceding the date provided for payment of the tax. Section 8 of the same Article defines the word "oil" as meaning petroleum oil, mineral oil, or other oil taken from the earth. We are of the opinion that under the decisions of the courts of our State casinghead gas is an oil within the meaning of said Article 7071. Livingston Oil Corp. vs. Waggoner, 273 S. W., 903; Reynolds vs. McMan Oil & Gas Co., 11 S. W. 2d. 778; Magnolia Petroleum Co. vs. Connellee, et al, 11 S. W. 2d. 158.

It is our opinion in response to your second question that the value of such casinghead gas for the purpose of determining the tax under the Article in question would be the average market value during the quarter preceding the date of payment as and when produced from the earth.

Yours very truly,
(Signed) W. DEWEY LAWRENCE,
Assistant Attorney General

Who's Who
IN NATURAL GASOLINE MANUFACTURE

STANDARD OIL CO. OF INDIANA

The Standard Oil Co. of Indiana directly and through subsidiary companies is a manufacturer of natural gasoline. The parent company for several years has operated five plants in Oklahoma. These plants are located in the older fields of the State and the present production is substantially less than the rated capacity of the plants which totals 79,848 gallons daily.

This production is generally moved to the three middle western refineries of the Standard company located at Whiting, Ind., Wood River, Ill., and Sugar Creek, Mo.

Through a subsidiary, the Indiana Standard is the largest manufacturer of natural gasoline in the Rocky Mountain Field. The Midwest Refining Co. operates plants in the Salt Creek Field of Wyoming with a rated capacity of 80,000 gallons daily. This production is moved by pipe line to the Casper, Wyo., refinery of the Midwest company.

The Dixie Oil Co., another subsidiary, has recently increased its natural gasoline production through the acquisition of the properties of the McMann Oil & Gas Co., one of the oldest operators in the Mid-Continent Field. The plants, now operated by the Dixie company, are located in Oklahoma and Texas. The Dixie company also operates a 10,000-gallon plant in Louisiana, the output of which is taken by the Dixie refinery near Shreveport. The output of the McMann plants is sold on the general market at present.

The operations of the parent and subsidiary companies is separate so far as natural gasoline plants are concerned. E. J. Goldman is superintendent of the Standard of Indiana plants with headquarters at Drumright, Okla. P. G. Weidner is superintendent of the Midwest plants with headquarters at Casper. The Dixie plants are managed by the manufacturing department with headquarters in Tulsa.

STANDARD OIL CO. OF INDIANA
(All plants in Oklahoma)

Location—	Daily capacity (gals.)
NE, Sec. 4-18n-7e	13,867
NE, Sec. 21-17n-7e	13,134
SW, Sec. 34-18n-7e	19,898
NE, Sec. 4-16n-7e	7,949
NW, Sec. 29-18n-7e	25,000
MIDWEST REFINING CO.	
Salt Creek Field, Wyoming	80,000
DIXIE OIL CO.	
Desdemona, Tex.	8,000
Burkburnett, Tex.	4,000
Sec. 14-21n-15w, Caddo Parish, La.	10,000

Construction and Operation

TO SUPERINTENDENTS*

While the duties of the superintendent of the gasoline department are chiefly administrative and executive, he must nevertheless be conversant with the changing technique in the industry. No man in any industry can "rest on his oars." Over and above the general supervision of his plants, he must find time to post himself on what is new and better in the industry.

For the greater part of his continuing education, the superintendent can depend upon the sales fraternity. Everything for every purpose is on the market. It is another matter to select what is wanted for a particular purpose. No doubt many mistakes are made due to an overzealous salesman, but, in the long pull, if one knows what one wants, the salesman wins. If a man is in the market for a water softener and does not impart to the manufacturer all of the conditions, such as water analysis and the use to which the water is to be put, he might get a satisfactory softener for one purpose but the water might foam when run into boilers; yet it is soft as to scaling in condensers or coils. There might be a very decided advantage in open condensers for a country where a low wet bulb obtains, yet for average conditions, with good water, the manufacturer might recommend closed units if he is not acquainted with the conditions of the use to which the material will be put. That is something again where the general superintendent is expected to use the necessary foresight.

No one company can do all of the pioneering. First one company, and then another, buys a new piece of equipment or installs an untried process. While at one time these things were state secrets, today it is possible for almost anyone to see the results. Thus salesmen and engineers are ever ready to arrange for visits to the plant or plants employing new and better equipment and processes. It is of considerable value to see a new type of cooling tower in operation or to check up on the performance of a good still before adopting the new equipment at the considerable cost involved therein. Good ideas as to hookup might be obtained at the same time. The superintendent who passes upon the purchase of materials has no alternative in many cases other than to inspect the plant in question or arrange for a representative from his staff to do so.

Whether his company is expanding or not, the superintendent should make periodic visits to other plants in his environs to see what, if anything, can be adopted by his company. Every few years he should supplement these trips with a visit to plants in another part of the country. One sees better in entirely new surroundings. Often one gets a lead on places to visit by articles in trade papers. The writer has made many profitable inspections of plants to supplement the story told in these papers about new equipment and processes. The management should and does encourage these visits and opportunities for the exchange of ideas among men in the same industry.

*Twenty-third of a series of articles explaining the inner working of a natural gasoline organization. The series was prepared by an operator actively engaged in all phases of construction and operation.

BUILD BOOSTER PLANT

The Indian Territory Illuminating Oil Co. is building a lift station in the SW, Section 14-11-3w, on the Fox lease and will install twenty 90-horsepower compressors. The plant is expected to be ready for operation within the next three weeks.

Large Decline in Gasoline Production Oklahoma City Field

Natural gasoline plants in the Oklahoma City Field have materially reduced their production schedules as a result of the new plan of prorating crude and at the present time only about 128,000 gallons is moving from the field daily. This is about one-half of that produced two months ago and about one-fourth the capacity of the plants, not including the production which could result from the operation of the so-called rerun units which rectify the large quantities of drip gasoline resulting from the high natural pressure in the field when the wells are opened.

The plants' operations have been extremely erratic and the supply of gas varies over such a wide range it is even necessary to suspend operations at times.

There is little new building going on among the gasoline plants in this territory for the field is overbuilt within its present boundaries and until a revision is made in the proration schedule whereby wells will be allowed to produce more than the 8⅓ per cent of their potential, the present inactivity will continue. This does not mean, however, that the importance of the field as a source of natural gasoline has been lessened except for the present. The plants which are there have been built for permanency and stand ready to operate at higher schedules at such a time as the crude proration is lifted. Additions to these plants will very likely be necessary some day and as the field is further extended new plants will likely be built but this turning point seems distant in the future. The crude situation dominates the operations of the natural gasoline plants because of the dependency upon production for the supply of gas the time for increased activities is just as indefinite as predicting when proration will be lifted.

As a result of the new proration program, the Shell Petroleum Corp. shut down its plant in this field. This has a capacity of 50,000,000 feet of gas daily and is located on the Petty lease in the NE, Section 30-11-2w. Several booster plants stand idle and the program of installing gas lift plants in preparation for the time the wells would cease flowing by natural pressure, has also been dampened by the more stringent curtailment program. The lesser production has undoubtedly had a beneficial effect on the market, however, for natural gasoline prices have again reached a level near refinery gasoline prices. Manufacturers having plants in this field expected a larger production and sold in advance and for the past week have had to buy on the open market to make up for the difference.

NATURAL GASOLINE PLANT OPERATIONS IN THE OKLAHOMA CITY FIELD

Company, location—	Maximum gas capacity cu.ft. daily	Present daily gasoline prod.
I.T.I.O., Bodine	50,000,000	8,000
I.T.I.O., Button	50,000,000	*8,000
I.T.I.O., Verne	50,000,000	8,000
I.T.I.O., Jones	50,000,000	8,000
I.T.I.O. and Cromwell-Franklin interests, Farley	50,000,000	8,000
I.T.I.O. and Cromwell-Franklin interests, Trosper	50,000,000	12,000
Phillips, SW, 32-11-2w	50,000,000	10,000
Phillips, SW, 1-11-3w	50,000,000	15,000
Shell, Petty	50,000,000	S.D.
Wirt Franklin, Lowry	40,000,000	6,500
Sinclair, NW, 30-11-2	100,000,000	*25,000
Amerada, SE, 30-11-2w	40,000,000	*12,000
Coline, Olds	7,500,000	8,000

*Includes rerun gasoline.

Brief Items for Petroleum Refiners

CODE SIGNS ARE NOW AVAILABLE AT A.P.I.

NEW YORK, Aug. 11.—Orders are being received for metal signs designed by the American Petroleum Institute for the use of signers of the National Code of Practices for Marketing Refined Petroleum Products. These signs are to be publicly displayed at their places of business, and they bear the following inscription:

This company has accepted
and is observing
THE NATIONAL CODE OF
PRACTICES
FOR
MARKETING REFINED
PETROLEUM PRODUCTS
sponsored by
American Petroleum Institute
approved by
FEDERAL TRADE
COMMISSION
on
July 25, 1929.

In a letter sent to those placing orders for the signs, W. R. Boyd, Jr., executive vice president of the Institute, says:

"Display at your places of business of signs indicating that you have accepted, and are conducting your marketing operations in accordance with the provisions of the National Code of Practices for Marketing Refined Petroleum Products represents your part in a nationwide movement.

"It is believed that these signs have real advertising value. They will inform motorists throughout the country that you and 16,000 other marketers have taken a stand for fair and ethical competition, good business principles, and sound marketing practices. They tell the motorist he can depend upon your company for quality products, fair treatment, and fair prices.

"May we suggest that you indicate your support of the code in advertisements of your products wherever appearing in newspapers, magazines, or other publications and advertising agencies? A facsimile of the 'sign of the code' carried in the advertisement would be appropriate; mention would be helpful."

BANNER IN NEW YORK CITY

NEW YORK, Aug. 11.—Standard Oil Co. of New York, which has been introducing "Banner" gasoline in up-state markets and in New England during the past few months, has introduced its new product in the metropolitan New York market. The "Banner" product is the company's new standard-priced product.

Commenting on the marketing of "Banner" motor fuel in New York City, W. B. Velsor, general manager of Socony's New York City division, said: "The new gasoline does not indicate any intensified competition in this territory on our part, but is rather the Standard Oil Co.'s response to the need for a new non-premium gas that would be in line with recent developments in automobile engine design."

LION FORMS SALES COMPANY

The Lion Oil Refining Co. has organized the Lion Oil Sales Co., a wholly owned subsidiary, to market gasoline and other refined petroleum products throughout Arkansas. The Sales company will maintain headquarters at Little Rock and will acquire retail filling stations and bulk terminals as rapidly as possible. T. H. Barton, president of Lion Oil, will also be president of the subsidiary company.

STANDARD NEW JERSEY AND OTHERS PLAN TO SELL TIRES AT STATIONS

NEW YORK, Aug. 11.—Announcement that Standard Oil Co. of New Jersey and subsidiary organizations will market tires at their filling stations marks the first step in the diversification of marketing operations of oil companies that will probably be followed by the addition of other products to the stocks of gasoline stations, it is reported here.

Standard Oil Co. of New York has stated that it does not contemplate the merchandising of tires at its stations, but with this exception, it is believed that most of the other major factors in this area, including Shell, Texas, Tidewater, Atlantic Refining and others will follow in the steps of the New Jersey company.

Marketing of automobile tires and tubes through gasoline filling stations is a logical development, and has many advantages both to the oil companies operating the stations and the consumers themselves. Under present tire marketing practices, motorists ofttimes hesitate to start motor trips with badly worn tires, fearing that the tires will blow out on the road and that they will be "gypped" through being compelled to buy a tire of unknown or dubious quality at a good stiff price to replace the blown "shoe." With filling stations handling tires of known quality at posted prices uniformly maintained, motorists will have much of the uncertainty of tire maintenance and replacement removed.

Sale of tires at filling stations will also effect substantial improvement in the returns on the investment of oil companies in these stations, and will boost the morale of company station operators as well, as filling station managers in most instances share in the earnings of their station through a commission arrangement with the company which employs them.

Atlas Tires Supplied

Standard Oil Co. of New Jersey will obtain the tires which it will market from the Atlas Supply Co., which in turn purchases its requirements from the Miller Rubber Co., controlled by the Goodrich Rubber Co. According to F. H. Bedford, Jr., a director of New Jersey Standard, the tire marketing plans of the company involve a merchandising arrangement only, the company having no intention of entering the tire manufacturing business. Only one quality of tire will be handled, he declared, this "shoe" to be guaranteed by the company, when used on passenger cars, for 12 months against accidents, blowouts, cuts, bruises, rim cuts, underinflation, wheels out of alignment, faulty brakes, or any road

(Continued on Page 151)

ARROW RESUMES OPERATIONS

After being practically shut down for several weeks past, the Arrow Oil & Refining Co. at Lewistown, Mont., is again running full time. New sources of crude supply will enable the plant to operate at capacity indefinitely from now on. The new pipe line being promoted by Ray Phebus and others, to carry oil from the Big Horn Basin into Montana for a market, will also become a source of additional crude supply for the Lewistown refinery.

BUCK MADE CHAIRMAN

NEW YORK, Aug. 11.—Appointment of A. F. Buck, Sinclair Refining Co., Atlanta, Ga., as chairman of the South Carolina Code Committee has been announced by the American Petroleum Institute. Chairman Buck succeeds C. R. Dillard, who resigned because of transfer. The new chairman has been empowered to enlarge the committee, now consisting of seven members, should a greater representation of the industry be found necessary.

SPECIAL BOOKLET ON CODE

NEW YORK, Aug. 11.—C. F. Spangler, chairman, Wisconsin Code Committee, has announced the publication of a special booklet containing the National Code of Practices, interpretations of same to date, and special explanations of the rules and procedure under the code. Copies have been mailed to all signers of the code in Wisconsin; additional copies are available by writing L. O. Woehrer, secretary of the committee, 76 Burleigh Street, Milwaukee, Wis. The booklet lists all signers of the code operating in Wisconsin.

TIDE WATER BUYS DEMMY OIL

NEW YORK, Aug. 11.—Tide Water Oil Co. has taken over the business of the Demmy Oil Co. of Scranton, Pa., operating in Susquehanna, Lackawanna, Wayne, Luzerne, Monroe and Pike Counties, Pennsylvania, with two bulk plants, six service stations, and 125 dealer accounts.

Distribution in the territory affected will be under the direction of Mr. Demmy, who will also manage Tide Water's sales activities in Wilkes-Barre and Pittston, Pa.

OLNEY MAKING REPAIRS

The Olney Refining Co., Olney, Tex., in Young County, is now undergoing some extensive repairs and additions, one of which is the addition of a new tube still unit, representing an investment of around $150,000. The capacity of the plant at the present time is 2,500 bbls. It is operated on Archer and Young County crude. Reese S. Allen of Wichita Falls, and associates, purchased the plant from C. T. Anderson and S. J. Marcell, who constructed it in 1924.

SCHOO ARKANSAS SECRETARY

LITTLE ROCK, Ark., Aug. 11.—J. C. Schoo, Jr., has been employed as secretary of the Arkansas Code Committe, according to an announcement of L. C. Huffman, chairman. Mr. Schoo has opened temporary offices at 208 Gay Building, Little Rock, Ark. His first act was to invite all code signers in Arkansas and those interested in the code to attend the next meeting of the committee at the Lafayette Hotel, Little Rock, Ark., Wednesday, August 27, 1930.

CHANGE IN COUNTRY Q.D.A.

CHICAGO, Aug. 9.—Effective August 5, the Standard Oil Co. (Indiana) changed its country Q.D.A. discounts to 3 cents on monthly sales of 500 gallons of gasoline or more and 4½ cents on sales of 75,000 gallons or more. The new scale does away with the intermediate brackets of 2,000 and 6,000 gallons with discounts of 2½ and 3 cents respectively. These new discounts are much more favorable to the smaller dealers as even a roadside pump ought to be good for sales of at least 500 gallons in one month.

PURE OIL LINE IN MICHIGAN OPERATING

About 9,000 bbls. of crude oil is being transported daily from the Mount Pleasant Field to the new Bay City water terminal through the new Pure Oil Co.'s 40-mile pipe line, it was announced today.

First tests of the line were made last week and it is now in full operation with plans for the first shipment of a tanker of crude from the Bay City dock to the Imperial Refining Co. at Sarnia, Ontario, on Thursday, August 14. A load of about 17,000 bbls. will be shipped that day and it is planned to maintain regular tanker shipments thereafter.

The new pipe line is a 6-inch main and connects the Pure Oil tank farm in Greendale Township, Midland County, with a new tank farm now being constructed at the Bay City dock. The company has seven 55,000-bbl. storage tanks in the field and four of a battery of eight 55,000-bbl. tanks have been completed at the dock.

For the past four weeks or more practically all of the crude purchased by the Pure has been run into storage at the field tank farm. Company officials also have urged producers throughout the field to limit their operations to the minimum drilling offsets only in proved territory and as few wildcats as possible.

The recent price cut from $1.55 to $1.45 has been interpreted as a Pure move to curtail new developments during the present period of overproduction of crude and a decline in the crude oil market. Little change is anticipated by Pure officials at Mount Pleasant until next spring. About 6,500 bbls. of the total field production of about 8,500 bbls. a day is being run by Pure and placed in storage for later boat shipments.

SCHULZE HIGH VACCUM PROCESS

CHICAGO, Aug. 11.—The Red River Refining Co., owner of the Schulze Vacuum Process patents, has secured a permanent injunction against the Wheeler Manufacturing Co. of Philadelphia, which it believes is important. The suit involved U. S. Letters No. 1,448,709, assigned to the Red River Refining Co. It is understood that the defendant has compensated the Red River Refining Co. for all damages sustained and no appeal will be taken.

The Wheeler Manufacturing Co. was not a refiner nor user of the devices on which the decree was based but a manufacturer selling to refiners and others. The injunction which is for the life of the patent prohibits them from manufacturing any part used in the Schulze units and covered by patents granted by the United States Patent office.

MESSLER WITH INDIAN REF. CO.

CHICAGO, Aug. 11.—J. E. Messler has been appointed regional manager of tank car sales of lubricating oils for the Indian Refining Co. of Lawrenceville, Ill. He will make his headquarters at the Chicago office, 332 South Michigan Avenue. Mr. Messler is very well known to the buyers of lubricating oils in this section, as he has been the manager of the Chicago office of the Crown Central Petroleum Co.

GASOLINE BY PIPE LINE

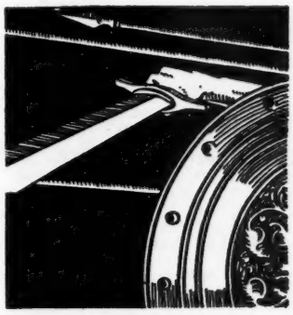
Next week will probably see the first runs of gasoline made through the Magnolia Petroleum Co.'s 28-mile 3-inch line from its Fort Worth refineries, near Fort Worth, one of them having been acquired when the company purchased the White Eagle Oil & Refining Co. Capacity of that plant is 6,000 bbls. This is the first gasoline line to be constructed in Texas.

HABIT

SAYS OLD METHODS ARE SUFFICIENT

PROGRESS

ISSUES A CHALLENGE



When first built, your plant was one of the greatest assets in your business. Is it that today? Are you receiving the maximum income by using the improved methods and modern equipment now available for increasing the yield of standard products as well as the manufacture of valuable by-products in your plant?

Greater profits await the Refiner who keeps apace with progress.

Our organization specializes on these problems that every plant owner faces. We offer a complete service beginning with laboratory analysis and carrying through to the entire engineering and construction. We work at a pre-arranged cost, within a specified time, according to definite specifications—and we guarantee the quantity and quality of products to be produced.

WHEALTON & TOWNSEND *Ltd.*

INCORPORATED

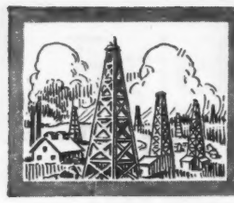
"Save Through Skill"

TURN-KEY SERVICE • ENGINEERS

Embracing Plant Designing, Plant Construction, Plant Rebuilding, Consultation, Management, Laboratory Service, Field Research

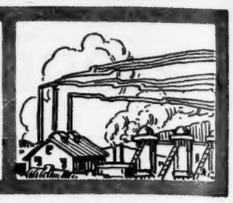
Subway Terminal Bldg., Los Angeles

120 E. Brady Street, Tulsa, Oklahoma



REFINERY AND CRUDE PRICES

Quotations on refined products are for interstate or export movement unless otherwise noted.



GASOLINE AND NAPHTHA

OKLAHOMA (Group 3)—	Aug. 12		Aug. 5		July 29	
50-52 450 endpoint	.06	.06¼	.06	.06¼	.06	.06¼
56-58 450 endpoint	.05¾	.06¼	.05¾	.06¼	.05¾	.06¼
*58-60 437 endpoint (U. S. Motor)	.0646		.0642		.0651	
*60-62 437 endpoint	†.06	.06¼	†.06	.06¼	†.06	.06¼
*60-62 400 endpoint	.0694		.06932		.07125	
*64-66 375 endpoint	†.06¾	.07	.0675		†.06⅝	.07
68-70 360 endpoint	.07	.07½	.07	.07½	.07	.07½
64-66 437 endpoint (blend)	.05½	.06	.05½	.06	.05½	.06
NORTH TEXAS—						
50-52 450 endpoint	.05¾		.05¾	.06	.05¾	.06¼
58-60 450 endpoint	.05½	.05¾	.05⅝	.05¾	.05¾	.06
58-60 437 endpoint (U. S. Motor)	.05½	.06	.05⅝	.06	.05¾	.06¼
60-62 400 endpoint	.05⅞	.06⅛	.05⅞	.06⅛	.06	.06¼
64-66 390 endpoint	.06¼	.06½	.06¼	.06½	.06¼	.06½
64-66 375 endpoint	.06½	.06¾	.06½	.06¾	.06½	.06¾
68-70 360 endpoint	.06⅞	.07⅛	.06⅞	.07⅛	.06⅞	.07
64-66 437 endpoint (blend)	.05½	.06	.05½	.06	.05½	.06
*NORTH LOUISIANA—						
58-60 437 endpoint (U. S. Motor)	.06¾	.07	.06¾	.07	.06¾	.07
*ARKANSAS—						
58-60 437 endpoint (U. S. Motor)	.06¾	.07	.06¾	.07	.06¾	.07
PENNSYLVANIA—						
52-54 Naphtha	.07		.07	.07¼	.07	.07¼
54-56 Naphtha	.07		.07¼		.07¼	.07½
58-60 Gasoline	.07¼	.07½	.07¼	.07½	.07½	.07¾
60 Gasoline	.07½	.07¾	.07½	.07¾	.07¾	.08
62 Gasoline	.07¾	.08	.08	.08¼	.08	.08¼
64 Gasoline	.08		.08¼	.08½	.08¼	.08½
68-70 350 endpoint gasoline	.08¾		.08¾	.09	.08¾	.09
CALIFORNIA—						
†58-60 437 endpoint (U. S. Motor) domestic	.09½	.10	.09½	.10	.09½	.10
CHICAGO DISTRICT (Based on Group 3)—						
50-52 450 endpoint (Naphtha)	.06	.06¼	.05¾	.06	.05⅝	.06
56-58 450 endpoint	.05¾	.06	.05¾	.06	.05¾	.06¼
58-60 437 endpoint (U. S. Motor)	.05¾	.06¼	.05¾	.06½	.05⅞	.06½
60-62 400 endpoint	.06	.06½	.06	.06½	.06	.06½
64-66 375 endpoint	.06¾	.07	.06¾	.07	.06¾	.07
68-70 360 endpoint	.07	.07¼	.07	.07¼	.07	.07¼
64-66 437 endpoint (blend)	.05½	.06	.05½	.06	.05¾	.06
GULF COAST (Export)—						
58-60 U. S. Motor	.08		.08		.08	
60-62 400 endpoint	.09		.09		.09	
61-63 390 endpoint	.09¼		.09¼		.09¼	
64-66 375 endpoint	.09½		.09½		.09½	

*Louisiana, Arkansas, Mississippi and East Texas delivery. †For local consumption.

NATURAL GASOLINE

OKLAHOMA (Group 3)—	Aug. 12		Aug. 5		July 29	
Grade A, 72-79.9, 375 e.p., rec. 90%	.05½		.05		.04¾	
Grade AA, 80-87.9, 375 e.p., rec. 90%	.05½		.05		.04¾	
Grade B, 76-83.9, 375 e.p., rec. 85%	.05½		.04¾		.04½	
Grade BB, 84-92, 375 e.p., rec. 85%	.05½		.04¾		.04½	
Grade C, 80-92, 375 e.p., rec. 78%	.05⅜	.05½	.04¾		.04½	
NORTH TEXAS—						
Grade A, 72-79.9, 375 e.p., rec. 90%	.05½		.05		.04¾	
Grade AA, 80-87.9, 375 e.p., rec. 90%	.05½		.05		.04¾	
Grade B, 76-83.9, 375 e.p., rec. 85%	.05½		.04¾		.04½	
Grade BB, 84-92, 375 e.p., rec. 85%	.05½		.04¾		.04½	
Grade C, 80-92, 375 e.p., rec. 78%	.05½		.04¾		.04½	
NORTH LOUISIANA—						
Grade AA, 80-87, 375 e.p., rec. 90%	.05½	.05⅝	.05	.05¼	.05	.05¼
Grade BB, 84-92, 375 e.p., rec. 85%	.05½		.04¾		.04¾	
Grade C, 80-92, 375 e.p., rec. 78%	.05½		.04½	.04¾	.04½	.04¾
CALIFORNIA—						
75-78. 375-390 endpoint	.07½	.08	.07½	.08	.06½	.06¾
CHICAGO DISTRICT (Based on Group 3)—						
Grade A, 72-79.9, 375 e.p., rec. 90%	.05½		.05		.04¾	
Grade AA, 80-87.9, 375 e.p., rec. 90%	.05½		.05		.04¾	
Grade BB, 84-92, 375 e.p., rec. 85%	.05½		.04¾		.04½	

BURNING OIL

OKLAHOMA (Group 3)—	Aug. 12		Aug. 5		July 29	
41-43 water white kerosene	.03	.03½	.03⅛	.03½	.03¼	.03¾
42-44 water white kerosene	.03½	.03¾	.03½	.04	.03½	.04
NORTH TEXAS—						
41-43 water white kerosene	.03	.03¼	.03	.03¼	.03⅛	.03¼
40-41 water white kerosene	.02⅞	.03	.02⅞	.03	.03	.03⅛
*NORTH LOUISIANA—						
41-43 water white kerosene	.04	.04¼	.04	.04¼	.04	.04¼
*ARKANSAS—						
41-43 water white kerosene	.04	.04¼	.04	.04¼	.04¼	
PENNSYLVANIA—						
43 Kerosene prime white	.04¼		.04¼		.04¼	
45 Kerosene water white	.04½		.04¼	.04½	.04½	.04⅝
46 Kerosene water white	.04¾	.05	.04¾	.05	.04¾	.05
300 Mineral Seal	.05½		.05¾	.06	.05¾	.06
CALIFORNIA—						
38-40 water white Kero. (high burning test)	.04	.04½	.04	.04½	.04	.04½
Engine distillate, 43-44, 445 endpoint	.07½	.08	.07½	.08	.07	.07½
Engine distillate, 42-44, 480 endpoint	.06½	.07	.06½	.07	.06	.06½
CHICAGO DISTRICT (Based on Group 3)—						
41-43 water white kerosene	.03	.03½	.03⅛	.03⅜	.03¼	.03½
42-44 water white kerosene	.03½	.03¾	.03½	.03¾	.03½	.03¾
GULF COAST (Export)—						
41-43 prime white	.06		.06		.06	
41-43 water white	.07		.07		.07	

*Louisiana, Arkansas, Mississippi and East Texas delivery.

FUEL OIL

OKLAHOMA (Group 3)—	Aug. 12		Aug. 5		July 29	
Below 18 Fuel Oil, per bbl.	.45	.50	.45	.50	.45	.50
18-22 Fuel Oil, per bbl.	.47½	.50	.47½	.50	.47½	.50
20-22 Fuel Oil, per bbl.	.50	.57½	.50	.57½	.50	.57½
22-26 Fuel Oil, per bbl.	.55	.60	.55	.60	.55	.60
24-26 Fuel Oil, per bbl.	.60	.65	.60	.65	.60	.65
26-30 Fuel Oil, per bbl.	.70	.75	.70	.75	.70	.75
28-30 Fuel Oil, per bbl.	.77½	.82½	.77½	.82½	.80	.85
32-36 Gas Oil (industrial)	.02⅛	.02¼	.02⅛	.02¼	.02⅛	.02¼
32-36 Gas Oil (straw color)	.02¼	.02½	.02¼	.02½	.02¼	.02½
36-38 Distillate	.02⅝	.02¾	.02⅝	.02¾	.02⅝	.02¾
38-40 Straw Distillate	.02¾	.03	.02¾	.03	.02¾	.03
NORTH TEXAS—						
Below 20 Fuel Oil, per bbl.	.40	.50	.40	.50	.40	.50
24-26 Fuel Oil, per bbl.	.60	.65	.60	.65	.60	.65
32-36 Gas Oil (industrial)	.02	.02⅛	.02	.02⅛	.02	.02¼
38-40 Straw Distillate	.02¾	.03	.02¾	.03	.02¾	.03
*NORTH LOUISIANA—						
18-20 Fuel Oil, per bbl.	.75	.80	.75	.80	.75	.80
30-32 Gas Oil	.02⅜	.02¾	.02⅜	.02¾	.02⅜	.02¾
*ARKANSAS—						
33-36 Distillate	.02¾	.03	.02¾	.03	.02¾	.03
30-32 Gas Oil	.02⅜	.02½	.02⅜	.02½	.02⅜	.02½
16-22 Refinery Fuel Oil, per bbl.	.60	.70	.60	.70	.60	.70
GULF COAST (South Texas)—						
Gas Oil	.03¾	.04	.03¾	.04	.03¾	.04
Bunker C Fuel (cargo lots), per bbl.	.75	.80	.75	.80	.75	.80
Bunker C Fuel (small lots)	1.05	1.10	1.05	1.10	1.05	1.10
PENNSYLVANIA—						
30-34 Fuel Oil	.03	.03¼	.03⅛	.03¼	.03⅛	.03¼
36-40 Fuel Oil	.03¼	.03½	.03¼	.03½	.03¼	.03½
CALIFORNIA—						
33-36 Distillate	.02½	.03	.02½	.03	.02½	.03
26-32 Distillate	.01¾	.02	.01¾	.02	.01¾	.02
15-20 Fuel Oil, Bunker (at tidewater)	.65	.75	.65	.75	.65	.75
15-20 Fuel Oil (cargo lots), per bbl.	.60	.70	.60	.70	.60	.70
27 plus Diesel, per bbl.	.80	.90	.80	.90	.80	.90
CHICAGO DISTRICT (Based on Group 3)—						
22-26 Fuel Oil, per bbl.	.57½	.62½	.57½	.62½	.57½	.62½
18-22 Fuel Oil, per bbl.	.47½	.52½	.47½	.52½	.47½	.52½
28-30 Fuel Oil, per bbl. (zero)	.77½	.82½	.77½	.82½	.77½	.82½
32-36 Gas Oil (zero)	.02½	.02⅝	.02½	.02⅝	.02⅜	.02½
32-36 Gas Oil (industrial)	.02¼	.02¼	.02⅛	.02¼	.02⅛	.02¼
38-40 Straw Distillate	.02⅝	.02⅞	.02¾	.02⅞	.02¾	.03

*Louisiana, Arkansas, Mississippi and East Texas delivery.

LUBRICATING OIL AND WAX

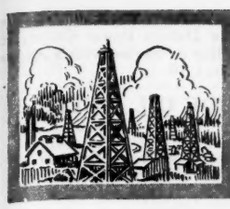
OKLAHOMA (Group 3)—	Aug. 12		Aug. 5		July 29	
100 vis., 2 color, 20-25 cold test	.06	.06½	.06	.06½	.06	.06½
100 vis., 3 color, 20-25 cold test	.05½	.06	.05½	.06	.05½	.06
150 vis., 3 color, 20-25 cold test	.07¼	.07½	.08	.08½	.08	.08½
150 vis., 4 color, 20-25 cold test	.07		.07½	.08	.07½	.08
180 vis., 3 color, 23-28 cold test	.08½	.09	.09½	.10	.09½	.10
180 vis., 4 color, 23-28 cold test	.08¼	.08½	.09	.09½	.09	.09½
180 vis., 5 color, 23-28 cold test	.08		.08½	.09	.08½	.09
200 vis., 3 color, 23-28 cold test	.10	.10½	.11	.11½	.11	.11½
200 vis., 4 color, 23-28 cold test	.09½	.10	.10½	.11	.10½	.11
200 vis., 5 color, 23-28 cold test	.09¼	.09½	.10	.10½	.10	.10½
240 vis., 3 color, 25-30 cold test	.13½	.14	.14½	.15	.14½	.15
240 vis., 4 color, 25-30 cold test	.12½	.13	.13½	.14	.13½	.14
240 vis., 5 color, 25-30 cold test	.11½	.12	.12½	.13	.12½	.13
280 vis., 3 color, 25-30 cold test	.15½	.16	.16½	.17	.16½	.17
280 vis., 4 color, 25-30 cold test	.14½	.15	.15½	.16	.15½	.16
280 vis., 5 color, 25-30 cold test	.13½	.14	.14½	.15	.14½	.15
Cylinder Stocks:						
600, steam refined, light green	.08	.12	.08	.11	.08	.11
600, steam refined, dark green	.06	.08	.06	.08	.06	.08
190-200 vis., D color, Bright Stock	.30		.33		.33	
150-160 vis., D color, Bright Stock	.25		.28	.32	.28	.32
*150-160 vis., D color, Bright Stock	.23	.25	.26	.28	.26	.28
150-160 vis., E color, Bright Stock	.23		.24	.26	.24	.26
Waxes:						
124-126 White Crude Scale Wax	.02	.02⅛	.02	.02⅛	.02	.02⅛

*High cold test. All bright stock prices are for domestic movement.

PENNSYLVANIA—						
34 Neutral	.05¾	.07	.05¾	.06½	.05¾	.06½
34 Sundebloom	.05½		.05½	.06	.05½	.06
36 Miners' Neutral	.05¾		.05¾	.06	.05¾	.06
150, 3 color	.12	.14	.12½	.14	.12½	.14
180, 3 color	.16	.18	.16	.18	.16	.18
200, 3 color	.18½	.21	.18½	.20	.18½	.20
220, 3 color	.23	.24	.23	.23½	.23	.23½
600, steam refined	.11	.11½	.10½	.11	.10½	.11
635, steam refined	.13½	.17	.15½	.17	.15	.17
650, steam refined	.15½	.16	.16	.19	.15½	.19
600, Pennsylvania Flash	.18	.19	.19	.21	.19	.21
630, Pennsylvania Flash	.26	.27	.28	.29	.28	.29
600, E filtered	.16	.17	.16½	.18	.16½	.18
600, D filtered	.19	.22	.20	.22	.20	.22
Pennsylvania Bright Stocks	.25		.25	.26	.24	.25
*122-124 White Crude Scale Wax	.02¼		.02¼		.02¼	
124-126 White Crude Scale Wax	.02¼		.02¼		.02¼	

*At New York.

GULF COAST (South Texas)—						
100 vis., 2-2½ color, pale oil	.06½	.06¾	.06½	.06¾	.06½	.06¾
200 vis., 3 color, pale oil	.09½		.09½		.09½	
300 vis., 3 color, pale oil	.10¾		.10¾		.10¾	
500 vis., 3½ color, pale oil	.12	.12¾	.12	.12¾	.12	.12¾
750 vis., 3½ color, pale oil	.13½		.13½		.13½	
1,200 vis., 3½ color, pale oil	.16		.16		.16	
2,000 vis., 6 plus color, red oil	.17		.17		.17	



REFINERY AND CRUDE PRICES

Quotations on refined products are for interstate or export movement unless otherwise noted.

200 vis., 5-6 color, red oil	.08¾	.09	.08¾	.09	.08¾	.09						
300 vis., 5-6 color, red oil	.10	.10¼	.10	.10¼	.10	.10¼						
500 vis., 5-6 color, red oil	.11¼		.11¼		.11¼							
750 vis., 5-6 color, red oil	.12¾	.13	.12¾	.13	.12¾	.13						
1,200 vis., 5-6 color, red oil	.15		.15		.15							
2,000 vis., 4 color, pale oil	.17		.17		.17							
200 vis., 2½ color, filtered oil	.11	.12	.11	.12	.11	.12						
300 vis., 2½ color, filtered oil	.12	.13	.12	.13	.12	.13						
CALIFORNIA—												
130 vis., 2½-3 color	.10¼	.10½	.10¼	.10½	.10¼	.10½						
200 vis., 2½-3 color	.11½	.11¾	.11½	.11¾	.11½	.11¾						
300 vis., 3-3½ color	.13	.13½	.13	.13½	.13	.13½						
350 vis., 3½-4 color	.13½	.13¾	.13½	.13¾	.13½	.13¾						
400 vis., 3½-4 color	.15	.15½	.15	.15½	.15	.15½						
Red Neutral:												
200 vis., 4½-5 color	.11	.11¼	.11	.11¼	.11	.11¼						
300 vis., 5-6 color	.12	.12¼	.12	.12¼	.12	.12¼						
400 vis., 5-6 color	.13¼	.14	.13¼	.14	.13¼	.14						
500 vis., 4½-5 color	.15¼	.15½	.15¼	.15½	.15¼	.15½						
500 vis., 5-6½ color	.15	.15¼	.15	.15¼	.15	.15¼						
600 vis., 6½ plus color	.16	.16¼	.16	.16¼	.16	.16¼						

Note—Bright stocks are not manufactured commercially on the Pacific Coast.

NEW YORK (BAYONNE) REFINERY PRICES

	Aug. 12		Aug. 5		July 29	
Gasoline, U. S. Motor, 58-60, 437 e.p.	.08	.10	.08	.10	.08	.10
Kerosene, water white, 41-43	.06¾		.06¾		.06¾	
*Fuel Oil, Bunker "C," 41-43	1.15		1.15		1.15	
Fuel Oil, Diesel, 28-30, per bbl.	2.00		2.00		2.00	
Gas Oil, 32-36 gravity	.04¾	.05¼	.04¾	.05¼	.04¾	.05¼
25 pale Paraffin Oil, tank car	.10¼		.10¼		.10¼	
28 pale Paraffin Oil, tank car	.07¼		.07¼		.07¼	
280 red Paraffin Oil, tank car	.12½		.12½		.12½	
250 red Paraffin Oil, tank car	.11½		.11½		.11½	
225 red Paraffin Oil, tank car	.10		.10		.10	
200 red Paraffin Oil, tank car	.09¼		.09¼		.09¼	
Refined Wax:						
120-122 a.m.p., per lb.	.03		.03		.03	
125-127 a.m.p., per lb.	.03¼		.03¼		.03¼	
130-132 a.m.p., per lb.	.03⅝		.03½		.03½	
133-135 a.m.p., per lb.	.04½		.04½		.04½	
135-137 a.m.p., per lb.	.04⅝		.04⅝		.04⅝	
Petrolatum in barrels, in carload lots, per pound:						
Dark Green	.01¾		.01¾		.01¾	
Amber	.03¼		.03¼		.03¼	
Extra Amber	.03⅜		.03⅜		.03⅜	
Cream	.06		.06		.06	
Lily White	.06⅜		.06⅜		.06⅜	
Snow White	.08		.08		.08	

*Lighterage 5.0 cents a barrel extra.

NEW YORK (BAYONNE) EXPORT PRICES

	Aug. 12		Aug. 5		July 29	
Kerosene, prime white	.07¾		.07¾		.07¾	
Kerosene, water white	.09		.09		.09	
600, steam refined cylinder stocks, in bbls.	.18½	.19	.18½	.19	.18½	.19
635, steam refined	.20½	.21	.20½	.21	.20½	.21
650, steam refined	.24½	.25	.24½	.25	.24½	.25
600, Pennsylvania Flash	.28		.28		.28	
630, Pennsylvania Flash	.31		.31		.31	
600, Warren E	.26		.26		.26	
600, Oil City E	.25		.25		.25	
Light 140-150 Bright Stocks	.33		.33		.33	
Dark 140-150 Bright Stocks	.31		.31		.31	

LOS ANGELES EXPORT PRICES

	Aug. 12		Aug. 5		July 29	
Kerosene, water white	.03¾	.04½	.03¾	.04½	.03¾	.04½
*U. S. Motor Gasoline, 53-55, 437 e.p.	.06½	.06¾	.06½	.06¾	.06½	.06¾

*Prices on coastwise shipments.

CRUDE OIL PRICES

OKLAHOMA, KANSAS, NORTH AND EAST CENTRAL TEXAS

Oklahoma City—Same as other Mid-Continent price schedule except Empire Pipe Line Co. posted all oil 40 gravity and above at $1.43 on April 10.
Corsicana heavy (April 10, 1930).....$ .80
Other fields .....See gravity table

TEXAS PANHANDLE

Gray County, Wheeler County and Carson-Hutchinson Counties—See gravity table.
In Noel-McConnell district, Prairie Oil & Gas Co. posted April 10, below 30 degrees, 75½ cents, with 5-cent differential upward to 34-34.9, $1.00½, and then a 3-cent differential upward to 44 and above at $1.35½.

WEST TEXAS

Iatan* .....Same as North Texas
Crane-Upton-Crockett, Pecos, Winkler Mitchell and Ector .....
.....See gravity table, Column 3
Howard and Glasscock .....
.....See gravity table, Column 9
Chalk† (April 10, 1930) .....$ .75

*Includes Westbrook Field. †Posted by Humble Oil & Refining Co.

ARKANSAS-NORTH LOUISIANA

Smackover, below 24 gravity (April 11, 1930) .....$ .90
Smackover, 24 gravity and above (April 11, 1930) 1.05
Carterville, Sarepta and Cotton Valley, below 36 gravity (April 11, 1930).... .85
Bellevue (April 11, 1930)..... 1.15
Urania (April 11, 1930) ..... .95
East El Dorado (April 11, 1930)..... .90
Other fields .....See gravity table
Cotton Valley crude above 36 gravity takes same gravity price schedule as shown for North Louisiana and Arkansas crude in Mid-Continent gravity price table.
Note—Smackover, Cotton Valley and Bellevue posted by Standard Oil Co. Louisiana and Magnolia Petroleum Co.; Urania posted by Louisiana Oil Refining Corp.; East El Dorado posted by Magnolia Petroleum Co.

Grade A (April 10, 1930)* $1.15
Grade B, 25 degrees and upward .....
.....See gravity table
Jennings, La. (April 10, 1930)†..... 1.10
Refugio (light) .....Same as Grade B
Refugio (heavy) (April 10, 1930)‖.... .85
Sorrento (April 10, 1930)‡..... 1.10
Markham (April 10, 1930)§..... .85
High Island (April 10, 1930)¶..... .95

*Humble Oil & Refining Co. †Gulf Pipe Line Co. ‡Sun Pipe Line Co. §The Texas Pipe Line Co. ¶Posted by Gulf Pipe Line Co. ‖Humble Oil & Refining Co. and Gulf Coast Pipe Line Co.

(Continued on Page 142)

CRUDE OIL GRAVITY TABLE

Gravity—	1 Okla.-Kans.	2 N. C. Texas No. La., Arkansas	3 Crane, Upton, Ector, Crockett, Winkler, Pecos, Mitchell, (West Texas) Lea, N. Mex.	4 Wheeler County (Texas Panhandle)	5 Gray County (Texas Panhandle)	6 Carson and Hutchinson (Texas Panhandle)	7 Salt Creek, Wyo.	8 Stephens, Ark.	9 Howard-Glasscock (West Texas)	10 Grade B Gulf Coast and Refugio Texas
Below 25	.75	.72	.65	....	....	....	....	....	.65	1.00
25 to 25.9	.80	.77	.68	....	....	....	....	....	.68	1.03
26 to 26.9	.85	.82	.71	....	....	....	....	....	.71	1.06
27 to 27.9	.90	.87	.74	....	....	....	....	.76	.74	1.09
28 to 28.9	.95	.92	.77	....	.75½	....	....	.81	.76	1.12
29 to 29.9	1.00	.97	.80	.75½	.80½	....	1.00	.96	.78	1.15
30 to 30.9	1.05	1.02	.83	.80½	.85½	....	1.05	.91	.80	1.18
31 to 31.9	1 10	1.07	.86	.85½	.90½	.77½	1.10	.96	.82	1.21
32 to 32.9	1.15	1.12	.89	.90½	.95½	.82½	1.15	1.01	.84	1.24
33 to 33.9	1.18½	1.17	.92	.95½	1.00½	.87½	1.18½	....	.86	1.27
34 to 34.9	1.22	1.22	.95	1.00½	1.05½	.92½	1.22	....	.88	1.30
35 to 35.9	1.25½	1 25½	.98	1.04	1.09	.96	1.25½	....	.90	1.33
36 to 36.9	1.29	1.29	1.01	1.07½	1.12½	.99½	1.29	....	.92	1.36
37 to 37.9	1.32½	1.32½	....	1.11	1.16	1.03	1.32½	....	....	1.39
38 to 38.9	1.36	1.36	....	1.14½	1.19½	1.06½	....	....	....	1.42
39 to 39.9	1.39½	1.39½	....	1.18	1.23	1.10	....	....	....	1 44
40 to 40.9	1.43	1.43	....	1.21½	1.26½	1.13½	....	....	....	1.46
41 to 41.9	1.46½	1 46½	....	1.25	1.30	1.17	....	....	....	1.48
42 to 42.9	1.50	1.50	....	1.28½	1.33½	1.20½	....	....	....	1.50
43 to 43.9	1.53½	1.53½	....	1.32	1.37	1.24	....	....	....	1.52
44 and above	1.57	1.57	....	1.35½	1.40½	1.27½	....	....	....	1.54

Column 1, Note—Above prices posted April 10, 1930, by Carter Oil Co. (beginning at 25° and below), and by the Prairie Oil & Gas Co. and other purchasers beginning at 24° and below, the Magnolia Petroleum alone excepted. The Magnolia on April 10 posted the following prices: Below 26 gravity, 70 cents; 26-26.9, 76 cents; 27-27.9, 82 cents; 28-28.9, 88 cents; 29-29.9, 95 cents; 30-30.9, $1.02. From 31 and up and including 44° and above Magnolia followed Carter price schedule, but made its whole schedule apply to its gravity purchases in Kansas, Oklahoma and North Central Texas alike.

Column 2—Humble Oil & Refining Co. posted above prices April 10, 1930, and was followed by all other companies in Texas except Magnolia which posted a different price schedule than Humble up to 33.9° (See note in paragraph just above). The Texas Company posted North Louisiana and Arkansas on April 10, and Standard of Louisiana posted on April 11, followed by other companies, but Magnolia's price schedule begins with below 28 gravity at 87 cents. North Central Texas includes North Texas, Ranger, Mexia, Powell, Richland, Wortham, Lytton Springs, Currie, Nocona, Moran and Corsicana light. Arkansas and Louisiana pools include Caddo, Bull Bayou, Crichton, Cotton Valley (above 36 gravity), DeSoto, Haynesville, Homer, El Dorado and Rainbow .

Column 3—Posted by Humble Oil & Refining Co. April 10 ,1930, and Magnolia Petroleum Co. April 10, 1930.

Columns 4, 5 and 6—Humble Oil & Refining Co., Prairie Oil & Gas Co., Magnolia Petroleum Co., April 10, 1930.

Column 7—Mid-West Refining Co. April 11. All crude over 37 gravity $1.32½.

Column 8—Louisiana Oil & Refining Co., April 11.

Column 10—Humble Oil & Refining Co., April 10. Magnolia Petroleum Co. posted below 25 gravity, 65 cents, with 3-cent differential upward to and including 36 and above, which was posted at $1.01.

CALIFORNIA CRUDE OIL PRICES

Standard Oil Co.-Union Oil Co. (Effective March 11, 1930)

Gravity—	1 Seal Beach, Salt Lake, Newport, Summerland, Lawndale, Los Angeles, Fullerton, Richfield, Torrance, Olinda-Brea, Alamitos Heights, Huntington Beach, Signal Hill, Inglewood	2 Whittier, La Habra, Coyote Hills	3 Midway-Sunset, Elk Hills, Lost Hills, Belridge, Buena Vista Hills	4 Montebello	5 Santa Fe Springs (June 14, 1930)	6 Santa Maria, Coalinga	7 Wheeler Ridge, Fruitvale	8 Orcutt, Ventura, Rincon	9 Ventura Avenue (Nov. 8)	10 Elwood Terrace	11 Athens, Rosecrans, Dominguez
14 to 14.9	.70	.70	.55	.70	....	.55	.55	.55	.70	....	....
15 to 15.9	.70	.70	.55	.70	....	.55	.55	.55	.70	....	....
16 to 16.9	.70	.70	.55	.70	....	.55	.55	.55	.70	....	....
17 to 17.9	.70	.70	.55	.70	....	.55	.55	.55	.70	....	....
18 to 18.9	.76	.76	.62	.71	....	.62	.62	.65	.76	....	....
19 to 19.9	.82	.82	.70	.77	....	.70	.70	.70	.82	....	....
20 to 20.9	.88	.87	.78	.83	....	.78	.78	.78	.88	....	....
21 to 21.9	.94	.93	.86	.90	.92	.86	.86	.90	.91	....	....
22 to 22.9	1.00	.98	.94	.97	.95	.94	.94	.95	.94	....	....
23 to 23.9	1.07	....	1.02	1.05	1.01	1.02	1.02	1.02	1.00	....	....
24 to 24.9	1.14	....	1.09	1.11	1.07	1.07	1.07	1.10	1 07	....	1.14
25 to 25.9	1.21	....	1.16	1.17	1.13	1.12	1.12	1.18	1.14	....	1.19
26 to 26.9	1.28	....	1.23	1.23	1.19	1.17	1.17	1.26	1.21	....	1.24
27 to 27.9	1.35	....	1.30	1.29	1.25	1.23	1.22	....	1.28	....	1.29
28 to 28.9	1.42	....	1.35	1.35	1.31	1.27	....	....	1.35	....	1.34
29 to 29.9	1 46	....	1.41	1.38	1.37	1.31	....	....	1.39	....	1.39
30 to 30.9	1.50	....	1.47	1.41	1.41	1.35	....	....	1.43	....	1.45
31 to 31.9	1.55	....	1.53	....	1.49	1.39	....	....	1.48	....	1.51
32 to 32.9	1.60	....	1 59	....	1.55	1.43	....	....	1.53	....	1.57
33 to 33.9	1.65	....	1.65	....	1.60	1.47	....	....	1.59	....	1.64
34 to 34.9	1.70	....	....	....	1.65	1.51	....	....	1.65	1.32	1.71
35 to 35.9	1.75	....	....	....	1 70	1.55	....	....	1.71	1.39	1.78
36 to 36.9	1.80	....	....	....	1.75	....	....	....	....	1.46	1.84
37 to 37.9	1.85	....	....	....	1.80	....	....	....	....	1.53	1.90
38 to 38.9	1.90	....	....	....	1.85	....	....	....	....	1.60	1.96
39 to 39.9	....	....	....	....	1 90	....	....	....	....	1.66	2.02
40 to 40.9	....	....	....	....	....	....	....	....	....	1.72	2.08
41 to 41.9	....	....	....	....	....	....	....	....	....	1.78	2.14
42 to 42.9	....	....	....	....	....	....	....	....	....	1.84	2.20

Kern River, Newhall-McKittrick, Mount Poso and Round Mountain, 11 to 13.9 gravity, 50 cents; 14 gravity and above 55 cents, effective March 11. On March 11, the Union Oil Co. posted Midway-Sunset, Elk Hills, Buena Vista, Lost Hills and Coalinga crude as follows: 11 to 13.9 gravity at 50 cents.

Column 1—Signal Hill, Seal Beach, Huntington Beach and Alamitos Heights crude, 14 to 32.9 gravity, inclusive; Richfield, Olinda-Brea and Fullerton, 14 to 30.9 gravity; Torrance and Inglewood, 14 to 28.9 gravity.

Column 2—Whittier crude, 14 to 22.9 gravity; Coyote Hills, 14 to 30.9 gravity.

Column 3—Kern River, Newhall and McKittrick, 11 to 19.9 gravity; Midway-Sunset Buena Vista and Elk Hills, 11 to 33.9 gravity; Lost Hills, 11 to 34.9 gravity; oil below 14 gravity posted at 50 cents.

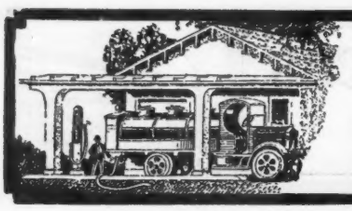
Column 5—Price change posted by Standard of California, June 14.

Column 6—Oil below 14 gravity posted at 45 cents.

Columns 8 and 9—Posted by Union Oil Co. only.

Column 10—Standard posted price f.o.b. tanker.

Kettleman Hills, 55 gravity and above, $1.65 (posted by Standard Oil Co. of California).



TANK WAGON MARKETS

Tank wagon quotations for gasoline and kerosene in United States as furnished by the larger marketing concerns August 12

ALL TANK WAGON AND SERVICE STATION QUOTATIONS INCLUDE TAXES

STANDARD OIL CO. (INDIANA)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'd tax of	tank wagon
Chicago†	18.0	19.0	3.0	13.0
Decatur, Ill.	18.2	19.2	3 0	13.1
E. St. Louis	17.4	18.4	3.0	12.2
Joliet	18.4	19.4	3.0	13.3
Peoria	18.2	19.2	3.0	13.1
Quincy	18.2	19.2	3.0	12.9
Davenport, Ia.	18.5	19.5	3.0	13.3
Des Moines	18.5	19.5	3.0	13.3
Keokuk	18.5	19 5	3.0	13.3
Sioux City	18 1	19.1	3.0	12.9
Duluth, Minn.	19.5	20.5	3.0	13.9
Mankato	19.1	20.1	3.0	13.7
Minneapolis	19.2	20.2	3.0	13 9
LaCrosse, Wis.	18.2	19.2	2.0	14.0
Milwaukee	17.1	18.1	2.0	12.9
Madison	17.3	18.3	2 0	13.1
Detroit, Mich.	18.8	19.8	3.0	14.7
Grand Rapids	18.7	19.7	3.0	14.6
Saginaw	18.9	19.9	3 0	14.8
Evansville, Ind.	19.0	20.0	4.0	14.0
Fort Wayne	19.4	20.4	4.0	14.4
Indianapolis	19.2	20.2	4.0	14.2
South Bend	19.4	20 4	4.0	14.4
Fargo, N. D.	20.9	21.9	3.0	15.9
Huron, S. D.	20.3	21.3	4.0	14.7
Sioux Falls	19.1	20.1	4.0	14.4
K. C., Mo.*	17.9	18.9	3 0	11.6
Springfield*	17.8	18.8	3.0	12.5
St. Louis*	16.9	17.9	2.5	12.3
St. Joseph	17.5	18.5	2.0	12.2
Wichita, Kans.	16.8	14.8	3.0	11.8
Bartlesville, Ok.	17.5	20.5	4.0	11.5

*State tax 2 cents; remainder city tax.
†Effective June 3, discounts on Q.D.A. in Chicago district 4 cents off service station price on purchases of 500 gallons or more per month and 5 cents on purchases of 1,000 gallons or more per month.

Effective August 5, the following quantity discounts from the service station price are allowed on monthly sales of gasoline: 500 gallons or more, 3 cents; 75,000 gallons or more, 4½ cents. Discounts are allowed each month and they are not cumulative. Delivery tickets showing date and quantity delivered must be sent to the seller before the tenth of the month to secure the discount on the previous month's purchases.

ROCKY MOUNTAIN DISTRICT

Continental Oil Co.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'd tax of	tank wagon
Denver, Colo.	16.0	19 0	4.0	15.5
Pueblo	17.0	20.0	4.0	15.5
Grand Junction	21.5	24.5	4.0	19.0
Casper, Wyo.	19.0	22.0	4.0	14.0
Cheyenne	20.5	23 5	4.0	15.5
Butte, Mont.	24.5	28.0	5.0	20.0
Billings	24.5	27.5	5.0	18.5
Great Falls	24.5	27.5	5.0	20.0
Helena	24.5	27.5	5.0	20.0
Salt Lake, Utah	20.0	23.0	3.5	17.0
Albu'que, N. M.	18.0	22.0	5.0	15.0
Boise, Idaho	23.5	26.5	5.0	19.0
Twin Falls	23.5	27.5	5.0	19.0

CENTRAL SOUTH DISTRICT

Standard Oil Co. (Louisiana)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'd tax of	tank wagon
N. Orleans, La.*	14.5	14.5	5.0	12.0
Baton Rouge	15.5	16.0	4.0	14.0
Alexandria†	17.5	18.0	5.0	13.0
Lafayette*	17.5	18.0	5.0	13.0
Lake Charles*	17.5	18.0	5.0	13.0
Shreveport	15.5	17.5	4.0	13.0
Knoxv'le, Tenn.	19.5	20.0	5.0	15.0
Memphis	17.0	17.0	5.0	12.5
Chattanooga	19.5	20.0	5.0	13.0
Nashville	18.5	19.0	5.0	15.0
Bristol	19.5	21.5	5.0	14.0
Lt. Rock, Ark.	17.0	17.0	5.0	13.0

*Includes city tax of 1 cent. Louisiana kerosene prices include 1-cent state tax. New Orleans kerosene price also includes 1-cent city tax.
†Gasoline price at Alexandria includes 1-cent tax in parish of Rapides.

SOUTHWESTERN DISTRICT

Magnolia Petroleum Co.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'd tax of	tank wagon
Dallas, Tex.	14.0	18.0	4.0	12.0
Fort Worth	14.0	17.0	4.0	11.0
Houston	15.0	19.0	4.0	11.0
San Antonio	13.0	17.0	4.0	11.0
El Paso	16.0	20.0	4.0	13.0
Texarkana	14.0	15.0	4.0	12.0
Muskogee*	16.0	19.0	4.0	9.0
Okla. City*	15.0	18.0	4.0	10.0
Tulsa*	16.0	20.0	4.0	10.0
Ft. Smith, Ark.	14.0	15.0	5.0	12.0
Little Rock	17.0	17.0	5.0	13.0

*Gasoline tank wagon price to dealers 2 cents under posted tank wagon.

PENNSYLVANIA—DELAWARE AND PART NEW ENGLAND

The Atlantic Refining Co.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'd tax of	tank wagon
Pittsburgh, Pa.	16.0	*21.0	...	13 0
Philadelphia	16.0	*21.0	...	13.0
Scranton	16.0	*21.0	...	13.0
Allentown	16.0	*21 0	...	13.0
Altoona	16.0	*21.0	...	13.0
Erie	15.0	*19.0	...	13 0
Dover, Del.	19.0	21.0	3.0	13.0
Wilmington	19.0	21.0	3.0	13 0
Springf'd, Mass.	17.5	19.5	2.0	12.5
Worcester	17.3	19.3	2.0	12.3
Boston	16 5	18.5	2.0	11.5
Providence, R.I.	16.7	18.7	2.0	11.7
Hartford, Conn.	17.5	19.5	2.0	12.5
New Haven	17.6	19.6	2.0	12.6

*Includes tax of 3 cents. Pennsylvania tax is collected by the dealer and paid by him direct to the State. The Atlantic Refining Co. recognizes a 2-cent per gallon discount on gasoline from its posted tank wagon markets on sales to dealers for purposes of resale. The Atlantic Refining Co. also recognizes a maximum discount of 2 cents per gallon on gasoline to commercial accounts under contract for one year.

PACIFIC COAST TERRITORY

Standard Oil Co. (California)

	Gasoline			Kero.
	Wholesale price	Retail price	Incl'd tax of	tank wagon
Fresno	19.0	17.0	3.0	17.0
San Francisco	19 0	12.0	3.0	16.5
Los Angeles	18.5	16.5	3.0	15.5
Reno, Nev.	24.0	22.0	4.0	19.0
Portland, Ore.	20.5	18.5	4.0	16.5
Seattle, Wash.	19.5	12 5	3.0	16.5
Tacoma	19.5	17.5	3.0	16.5
Spokane	21.5	21.5	3.0	20.5
Phoenix, Ariz.	17.0	20.0	4.0	20.0

Above prices are at company's plant or depots as company does not operate stations. A6-cent per gallon discount is given dealers and customers taking tank wagon lots except in Phoenix where the discount is 1 cent.

NEBRASKA

Standard Oil Co. (Nebraska)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'd tax of	tank wagon
Omaha	19.25	19.25	4.0	13.25
McCook	20.75	22.75	4.0	14.75
Norfolk	19.75	21.75	4.0	13.75
N. Platte	20 75	22.75	4.0	14.50
Scottsbluff	17.00	17.00	4.0	14.25

OHIO

Standard Oil Co. (Ohio)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'd tax of	tank wagon
Ohio points*	20.0	21.0	4.0	†14.0

*Dealers and commercial accounts 2 cents under tank wagon.
†Service station price 16 cents.

NEW YORK AND PART OF NEW ENGLAND DISTRICT

Standard Oil Co. (New York)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'd tax of	tank wagon
Albany N. Y.	17.6	19.6	2.0	15.6
New York*	16.3	18.3	2.0	14.3
Buffalo	17.8	19.8	2.0	14.8
Rochester	18.0	20.0	2.0	14.0
Syracuse	18.8	20.8	2.0	14.8
Boston, Mass.	16 5	18.5	2.0	13.5
Augusta, Me.	19.8	21.8	4.0	14.8
Manch't'r, N. H.	19.4	21.4	4.0	14.0
Burlington, Vt.	19.6	21.6	4.0	15.3

*Prices in steel barrels.

STANOLIND FURNACE OIL IN CHICAGO

Less than 100 gallons	9.0
100 to 349 gallons	8.0
350 gallons or more	7.5

Note—Outside Chicago furnace oil discount of 1 cent per gallon is given on deliveries of 100 to 349 gallons and 1½ cents on deliveries of 350 gallons or more.

NAPHTHA

	Tank wagon	Tank car
Oleum spirits	14.7	10.0
V. M. & P. naphtha	16.7	12.0
Cleaner's naphtha	17.0	14.9
Stanisol	17.0	15.4

Tank wagon prices f.o.b. Chicago; tank car prices f.o.b. Whiting.

ATLANTIC COAST DISTRICT

Standard Oil Co. (New Jersey)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'd tax of	tank wagon
Atlantic City	16.5	18.5	2.0	13.5
Newark, N. J.	15.5	17.5	2.0	12.5
Annapolis	18.0	20.0	4 0	13.0
Baltimore	17.2	19.2	4.0	10.5
Cumberland	19.0	21.0	4.0	14.0
Wash'gton, D.C.	15.7	17.7	2.0	12.7
Danville, Va.	19.8	21 8	5.0	13.8
Norfolk	18.3	20.3	5.0	11.0
Petersburg	19.3	21.3	5.0	13.3
Roanoke	19.0	20.0	5.0	14.0
Richmond	16.7	18.7	5.0	12.7
Charles'n, W.Va.	18.5	20.5	4.0	12.5
Keyser	19.1	21.1	4.0	14.1
Parkersburg	17.2	19.2	4.0	11.2
Wheeling	18.4	20.4	4 0	12.4
Charlotte, N. C.	20.3	20.3	5.0	14.3
Hickory	20.6	22.6	5.0	14.6
Mt. Airy	20.5	22.5	5 0	14.5
Salisbury	20.5	20.5	5.0	14.5
Charleston, S. C.	19.3	21.3	6.0	12.3
Columbia	21.2	23.2	6.0	14.2

A 2-cent per gallon discount off the gasoline tank wagon price is offered to dealers.

SOUTHERN DISTRICT

Standard Oil Co. (Kentucky)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'd tax of	tank wagon
Atlanta, Ga.	19.0	21 0	6.0	14.5
Augusta	22.0	24.0	6.0	15.5
Macon	20.0	22.0	6.0	14.0
Savannah	20.0	22.0	6.0	14.0
Birm'ham, Ala.	16 0	18.0	5.0	14.5
Mobile	18.0	18.0	4.0	13.5
Montgomery	19.0	21.0	4.0	15.0
Clarks'le, Miss.	19.0	21.0	5.0	12.5
Jackson	17 0	19.0	5.0	13.0
Natchez	19.0	21.0	5.0	13.0
Gulfport	20.5	22.5	5.0	13.0
Vicksburg	19.0	21.0	5.0	13.0
Jack'ville, Fla.	19.0	21.0	6.0	14.0
Miami	21.0	23.0	6.0	14 0
Pensacola	19.0	19.0	6.0	13.5
Tampa	20.0	22.0	5.0	13.0
Lexington, Ky.	19.0	20 0	5.0	14.5
Covington	21.0	22.0	5.0	14.5
Louisville	18.0	20.0	5.0	13.0
Ashland	19.0	21.0	5.0	15.0
Catlettsburg	19.0	21.0	5.0	15.0

In addition to the state tax of 4 cents on gasoline, Montgomery has city tax of 1 cent on gasoline and one-half on kerosene. Kerosene prices in Georgia include 1-cent tax. In Florida, an inspection fee of 0.125 cent; in Alabama, an inspection fee of one-half cent on kerosene and one-fourth cent on gasoline. To Pensacola, Birmingham and Mobile state taxes add 1-cent levy tax. To Gulfport state tax add privilege tax of 2 cents.

Effective April 2, price to dealers 2 cents under posted tank wagon price.

TANK WAGON CHANGES

Standard Oil Co. of Indiana revised its quantity discount schedule August 5 using only two brackets. A 3-cent discount is given on monthly purchases of gasoline of 500 gallons or more and a 4½-cent discount on purchases of 75,000 gallons or more.

Standard Oil Co. of Kentucky reduced the gasoline tank wagon and station prices 2 cents in Birmingham, Ala., August 2 to 16 cents and 18 cents.

Continental Oil Co. advanced the gasoline tank wagon and station prices 4 cents in Albuquerque, N. Mex., to 20 cents and 24 cents on July 30 and on August 2 reduced these prices 2 cents to 18 cents and 22 cents.

Standard Oil Co. of Louisiana reduced the gasoline tank wagon price one-half cent and the station price 2½ cents in Memphis, Tenn., on August 5 to 17 cents each.

CRUDE PRICE CHANGES

Contracts for delivery of Panuco, Mexican crude during July established an average price of 55 cents per barrel.

WILLISTON LINE READY

CASPER, Wyo., Aug. 9.—The new gas trunk line from eastern Montana to Williston, N. Dak., is now all laid and only the finishing and testing remains to be done before the line is put into service. The Montana Dakota Power Co. expects to open the line to service with a celebration on August 16.

CRUDE OIL PRICES

(Continued from Page 141)

ROCKY MOUNTAIN STATES

Ohio Oil Co.-Midwest Refining Co.
(Effective April 11, 1930)

Iles (Feb. 15, 1930)	$ .87
33 gravity and above	$ .87
Under 33 gravity	.65
Dutton Creek (Feb. 15, 1930)	1.25
Rock Creek, Wyo.	1.35
Salt Creek	See gravity table
Big Muddy	1.38
Grass Creek, heavy (July 27, 1928)	.90
Grass Creek, light	1.55
Mule Creek (May 21, 1929)	1.20
Elk Basin	1.55
Lance Creek	1.63
Poison Spider (March 14, 1927)	1.00
Notches (March 14, 1927)	.65
Rex Lake (February 22)	1.10
Osage	1.63
Lost Soldier (contract, May 22)	1.00
Hamilton Dome (March 14, 1927)	.85
Greybull (April 11, 1930)	1.55
Four Bear (May 31, 1929)	.85
Cat Creek	1.55
Pondera (Montana) (April 10, 1930)	1.55
Sunburst (Montana) (Feb. 15, 1930)	1.65
Hogback (Feb. 15, 1930)	1.40
Artesia (New Mexico)	1.05
Lea County	See gravity table

Note—Salt Creek, Osage, Cat Creek, Greybull and Hogback posted by Midwest Refining Co., and the remainder by the Ohio Oil Co. Both companies posted Grass Creek light and Elk Basin.

SOUTH CENTRAL AND SOUTHWEST TEXAS

Darst Creek (April 10, 1930)*	$1.15
Luling (April 10, 1930)	.85
Mirando (April 10, 1930)†	.85
Pettus (April 10, 1930)§	1.40
Salt Flat (April 10, 1930)§	1.15
Thrall‡	...
Lytton Springs (Lockhart)	See gravity table
Somerset (April 10, 1930):	
Below 33 gravity	$1.15
33 to 33.9 gravity	1.17
34 to 34.9 gravity	1.19
35 to 35.9 gravity	1.21
36 to 36.9 gravity	1.23
37 to 37.9 gravity	1.25
38 gravity and above	1.27

*Posted by Humble Oil & Refining Co. and Magnolia Petroleum Co. †Magnolia Petroleum Co., Humble Oil & Refining Co., Crown Central Pipe Line Co. ‡Thrall prices same as North Central Texas less 19½ cents per cwt. freight. §Humble Oil & Refining Co.

EASTERN STATES

Joseph Seep Purchasing Agency
(Effective July 11, 1930)

Seep Purchasing Agency withdrew from Bradford and Allegany Fields as a purchaser on May 16.

Penna Grade Oil in National Transit Lines (Pennsylvania)	$2.05
Penna Grade Oil in Southwest Pennsylvania Lines (Pennsylvania)	2.00
Penna Grade Oil in Eureka Pipe Line Lines (West Virginia)	1.90
Penna Grade Oil in Buckeye Pipe Line Lines (Ohio)	1.75
Corning 25-cent Grade Oil in Buckeye Pipe Line Co.'s Lines (May 2, 1930)	1.75
Somerset Oil in Eureka Pipe Line Lines (Kentucky) (April 11, 1930)	1.31
Somerset Oil in Cumberland Pipe Line Lines (Kentucky) (April 11, 1930)	1.47
Ragland Grade Oil in Cumberland Pipe Line Lines (Kentucky) (Jan. 29)	.60
Wayne District Oil in Cumberland Pipe Lines (April 11, 1930)	1.34

Tide Water Pipe Co.

Bradford district (July 11)	$2.10
Allegany district (July 11)	2.10

Pure Oil Co.

Cabin Creek, W. Va. (July 11)	$2.15
Kelly Creek, W. Va. (July 11)	2.00
Bradford Hollow (July 11)	2.00

MIDDLE WESTERN STATES

Ohio Oil Co.
(Effective April 11, 1930)

Lima (June 26, 1930)	$1.55
Wooster (June 26, 1930)	1.70
Illinois	1.65
Indiana (June 26, 1930)	1.32
Princeton	1.65
Plymouth	1.22
Western Kentucky	1.55
Midland, Mich.* (July 19)	1.45
Dundee, Mich. (April 16)‖	.... Same as Mid-Continent gravity scale
Upper and Lower Traverse sands, Mich. (April 16)‖	.....Same as Mid-Continent gravity scale
Saginaw, Mich. (April 11)†	.....Same as Mid-Continent gravity scale
Cumberland, Clay, Barren, Clinton and Monroe Counties, Kentucky (March 15)‡	1.50
Oil City, Ky. (July 25, 1930)§	1.35
Oil Springs (Canada) (June 28, 1930)¶	2.02
Petrolia (Canada) (June 23, 1930)¶	1.94

*Posted by Pure Oil Co. †Posted by Sun Oil Co. ‡Posted by Paragon Development Co. §Posted by Stoll Oil Refining Co. ¶Posted by Imperial Oil Co., Ltd. ‖Posted by Standard of Indiana for boat shipment. Local refiners posted Mid-Continent prices on April 11.

MEXICAN CRUDE

Panuco*	$0.55

*F.o.b. ship, based on July transactions.

The kind of *Service* that brings them back! . . . Sinclair Three-Gas Service

Sell Sinclair Three-Gas Service. Offer motorists three different fuels to select from. If they want the *Ace* of high test gasolines—one that gives quick starting, flashy pickup and brilliant performance—recommend Sinclair *Aircraft* Gasoline! Sinclair Aircraft is the Ace of high test gasolines because it is specially manufactured at Sinclair Refineries, meeting the requirements of the Federal Specifications Board for Aviation Gasoline—domestic grade—and gives sustained power. Due to its careful fractionation it is free from dissolved gases which cause gas locks, uneven distribution, galloping and engine balk.

Or—if they want high compression performance that stops knocks—there's Sinclair *H-C* Gasoline. It's all gasoline, nothing added.

And—if they prefer to pay three cents less per gallon—there's Sinclair *Regular* Gasoline—full of eager power—*great* for *economy* and *mileage*. The quality gasoline at a popular price!

A motorist doesn't have to "take" just one gasoline when he drives in for Sinclair "Three-Gas" Service . . . He can choose it to fit his own engine and his own preference.

When a motorist gets Sinclair Three-Gas Service he gets the kind of service that brings him back and makes him a regular customer.

SINCLAIR REFINING COMPANY, INC.
45 Nassau Street, New York

Atlanta ***Chicago*** ***Houston*** ***Kansas City***

Oil Well Stockholders to Act Sept. 9

President Harris Urges Approval of Terms Under Which United States Steel Has Option to Buy Company's Entire Business

Provisions of the plan under which ownership of the Oil Well Supply Co. is expected to pass into the hands of the United States Steel Corp. are announced in a letter to stockholders of the Oil Well Supply Co. from the president, Benjamin F. Harris. Mr. Harris says that following extended negotiations the board of directors of his company gave an option to the United States Steel Corp., subject to the approval of the stockholders, under the terms of which the steel corporation may acquire the entire business, properties and assets of Oil Well Supply, exclusive of its treasury stock and its corporation franchise, subject, however, to its liabilities, with the exception of the 6 per cent gold debentures issued by the Wilson-Snyder Manufacturing Corp. and guaranteed by the Oil Well Supply Co.

The Oil Well Supply Co. is to receive 64,992 shares of the common stock of the United States Steel Corp. and, at the option of the latter organization either $6,865,800 in cash or such number of shares of United States Steel, rated at its closing price on the New York Stock Exchange two days prior to the date of closing the option, as will equal that amount of cash.

Stockholders to Meet September 9

The option, if approved by the Oil Well Supply stockholders and exercised by the United States Corp., is to be closed on or before September 30, 1930. A special meeting of Oil Well Supply stockholders has been called for September 9, to take action on the proposed sale of the company's business.

President Harris' letter bears out reports that the deal would go through on the basis of six shares of Oil Well Supply stock for one of United States Steel. On completion of the transaction Oil Well Supply Co. will have as its sole assets the shares of United States Steel common stock and the cash specified or its equivalent in stock. Oil Well Supply will have no indebtedness other than the Wilson-Snyder debentures, and these will be redeemed soon after the sale is completed.

The aggregate amount of Wilson-Snyder debentures outstanding is $800,000 and the outstanding shares of Oil Well Supply preferred and common stocks (exclusive of treasury stock) are 60,658 shares of preferred stock and 389,972 shares of common stock.

Transactions Commended by Mr. Harris

Recommendation that the proposed sale be approved by Oil Well Supply stockholders is contained in the letter from Mr. Harris, who says:

"Your board of directors has given this option to the United States Steel Corp. and has taken the necessary preliminary steps to carry it into effect, and, in accordance with the enclosed notice of a special stockholders' meeting, will submit it to you on September 9, 1930, with the confident assurance that the transaction will commend itself to you. The present trend of the oil country business is toward a much closer relationship between the manufacturer and distributor of tubular products than has heretofore existed. In the light of this situation, your board of directors unhesitatingly recommends the approval by you of an option the terms of which it considers extremely advantageous to you."

Public Service Corp.

The electric and gas divisions of the Public Service Corp. of New Jersey made good showings in the first six months of the year when consideration is given to the unfavorable conditions that prevailed. While the normal rate of growth did not take place, gains were made in gross and net revenue from gas and electric sales, and in consumption. The company thereby was enabled to establish another record of earnings in both gross and net, as a result of which the balance available for the common stock more than covered the half year's dividend requirement, the stock having been placed on a $3.40 annual basis last December.

To last June 30, Public Service Corp. earned for its common shares $10,557,409, equal to $1.96 a share on 5,386,153 shares outstanding on June 30. During the corresponding 1929 period, $10,248,426 was earned or $1.93 a share on 5,328,033 shares. Sales of gas were up 3.1 per cent, with domestic and commercial ahead 3.8 per cent. Industrial sales were off around 1½ per cent, which the system should not be long in retrieving.

Vacuum Oil

Vacuum Oil Co. declared the regular quarterly dividend of $1 payable September 20, to stock of record August 30.

West Ohio Gas

West Ohio Gas Co. declared regular quarterly dividend of $1.75 on the Class A preferred, payable September 2 to stock of record August 15.

Imperial Oil, Ltd.

Imperial Oil, Ltd., declared regular quarterly dividend of 12½ cents a share, payable on or after September 2, to shareholders of record August 15.

Empire Gas & Fuel

Empire Gas & Fuel Co. declared regular monthly dividends of 66⅔ cents on the 8 per cent preferred, 58⅓ cents on the 7 per cent preferred, 54 1/6 cents on the 6½ per cent preferred and 50 cents on the 6 per cent preferred stocks, all payable September 1 to stock of record August 15.

Barnsdall Corp.

Earnings per share on the outstanding stock of the Barnsdall Corp. before reserves were equal to $2.74 for the six months of 1930, compared with $3.20 per share for the six months of 1929, and net earnings, after all charges, were equal to $1.49 per share for six months of 1930, compared with $1.83 for the same six months of 1929.

Twenty Representative Stocks

The Oil and Gas Journal's weekly average price of 20 representative petroleum stocks listed on the New York Stock Exchange and New York Curb, based on closing quotations for Wednesday, was as follows:

Mar. 12	48.30	May 28	50.98
Mar. 19	49.72	June 4	50.94
Mar. 26	51.00	June 11	46.65
Apr. 2	51.55	June 18	41.41
Apr. 9	53.26	June 25	42.37
Apr. 16	52.04	July 2	44.12
Apr. 23	53.39	July 9	44.11
Apr. 30	53.70	July 16	46.43
May 7	50.23	July 23	46.06
May 14	51.67	July 30	44.89
May 21	49.71	Aug. 6	45.24

Ohio Oil

Ohio Oil Co. declared regular quarterly dividend of $1.50 on the preferred, payable September 15 to stock of record August 16.

Atlantic Refining

Atlantic Refining Co. declared the usual extra dividend of 25 cents and the regular quarterly dividend of 25 cents, both payable September 15 to stock of record August 21.

Standard Oil of Kansas

Standard Oil of Kansas declared regular quarterly dividend of 50 cents, payable September 15 to stock of record August 23.

Tide Water Associated

Tide Water Associated Oil's first six months' earnings was 58 cents a share on 5,843,937 common shares, against 56 cents a share on 5,089,310 common shares in the like 1929 period.

Oil Profits

Pointing to the expansion in the oil industry, which has entailed an increased

(Continued on Page 146)

INDEPENDENT OILS ON NEW YORK CURB

Quotations compiled by Francis, Bro. & Co., Associate Members of New York Curb, Kennedy Building, Tulsa, Okla.

1930 High	1930 Low	Week ended August 6 Sales	High	Low	Close	Stocks—		Outstanding capital	Par value	Div. rate	Last paid	1927 High	1927 Low	1928 High	1928 Low	1929 High	1929 Low
⅜	⅛	700	⅛	⅛	⅛	American Consolidated Oilfields		$11,018,000	$5	.....	.....	2 2/16	.55	1½	.53	72c	⅛
4½	1½	400	2⅜	2¼	2¼	American Maracaibo	(sh)	700,000	N.P.	.....	.....	7½	2¾	9½	3⅛	8⅝	1⅛
1⅜	1⅛	200	1⅛	1⅛	1⅛	Argo Oil	(sh)	683,971	$10	.....	.....	2¾	1	4½	2¼	5	1½
21	17	100	17	17	17	British American (new, C.W.I.)		1,311,321	N.P.	25cQ*	1- 2-30	40	20½	55	32¾	62	7⅞
2¾	¾	100	1¼	1¼	1¼	Caribbean Syndicate (new)		$131,250	25c	.....	.. ....	28¼	15½	4½	3⅞	4⅞	1
44¼	24⅛	10,500	28⅝	28⅛	28⅝	Cities Service	(sh)	24,290,359	N.P.	30cA†	1- 2-30	58¾	40¼	90⅞	54	68⅛	20
93⅞	88	300	90⅛	89⅞	89⅞	Cities Service pfd.	(sh)	1,500,000	N.P.	50cM	1- 2-30	95⅜	87	103½	94½	98¾	84
¾	¼	200	1/16	1/16	1/16	Colombia Syndicate		$2,000,000	$1	.....	.....	3⅞	1⅛	3¼	.76	2	½
5⅞	3½	200	3½	3½	3½	Consolidated Royalty		$5,000,000	$10	15cQ	10-25-29	9¾	6⅜	8⅞	6¼	11⅛	2½
7⅝	5½	1,300	6⅜	6¼	6¼	Creole Petroleum E	(sh)	5,977,873	N.P.	.....	.....	14⅞	9½	17½	9½	11¾	5⅜
1	¼	200	⅜	⅜	⅜	Crown Central	(sh)	587,000	N.P.	.....	.....	3	.50	3¼	.76	2½	¼
21¾	12	100	13	13	13	Darby Petroleum	(sh)	1,019,392	N.P.	25cvQ	1-15-30	12	4	33½	3¼	26	6½
11	4½	100	7	7	7	Derby Oil & Refining	(sh)	500,000	N.P.	.....	.....	2½	74	2¼	1	11	2
60	30	25	44¼	44¼	44¼	Derby Oil & Refining pfd.		48,500	N.P.	.....	.....	16¾	4	21⅛	7½	44	20¾
166⅞	117⅛	200	125	125	125	Gulf Oil Corp.	(sh)	4,504,921	$25	37½Q	1- 1-30	118	86¼	165	101⅛	209	115
1¾	¾	200	¾	¾	¾	Intercontinental Petroleum		$5,682,000	$5	.....	.....	2½	.80	3⅜	1	2⅞	⅜
3	1⅝	100	1¾	1¾	1¾	Kirby Petroleum	(sh)	750,000	N.P.	.....	.....	2¼	1⅛	3	1¼	3⅝	1¼
4¾	1¼	300	1¾	1¾	1¾	Leonard Oil & Development		$50,000,000	$25	.....	.....	10⅞	5⅛	9⅜	5⅛	6¼	1
29	18⅝	100	19	19	19	Lion Oil & Refining	(sh)	250,000	N.P.	50cQ	1-31-30	27½	20	43⅞	20	38⅞	18
55⅞	34⅛	500	39	39	39	Lone Star Gas	(sh)	5,000,000	N.P.	20cQ	12-31-29	59⅜	37	69⅛	48½	67⅞	28
⅛	¼	800	¼	¼	¼	Magdalena Syndicate	(sh)	850,000	$1	.....	.....	2⅞	.80	1⅞	.50	1¼	¼
16	12	100	12½	12½	12½	Margay Oils		160,000	N.P.	50cQ	1-10-30	52	12	48½	32	38½	14
7½	2	100	2½	2½	2½	Mexico-Ohio Oil		.....	....	....	.....	12⅛	5	8	2¾	6⅜	2½
¾	⅜	1,700	½	⅜	⅜	Mountain & Gulf		$4,000,000	$1	2cQ	1-15-30	1½	1	1¾	.76	1½	¼
12⅛	8	500	10½	9¾	10¼	Mountain Producers		$1,682,182	$10	40cQ	1- 2-30	29¼	22¾	28⅞	19½	22⅞	7
3½	2⅜	100	2½	2½	2½	New Bradford Oil		$1,095,291	$5	12½cQ	1-15-30	5⅞	4⅝	5⅝	4¼	5	2½
7¼	3⅛	100	3⅝	3⅝	3⅝	New Mexico & Arizona		$1,000,000	$1	.. ..	.....	16	9¼	11⅞	7⅛	9⅜	2½
11¼	6	200	7½	7½	7½	North Central Texas	(sh)	400,000	N.P.	15cQ	12- 2-29	12¾	9½	14¼	8½	18½	6⅛
2½	½	400	⅝	½	⅝	Pandem	(sh)	489,875	N.P.	.....	.....	9⅜	3¼	6	2⅛	3½	½
4⅜	1¾	300	1⅞	1¾	1¾	Pantapec Oil	(sh)	1,506,000	N.P.	.....	.....	12⅛	7	15⅝	8½	10½	1⅞
No sales.						Pennok Oil		150,000	N.P.	.....	.....	13½	5⅛	7¾	4⅞	7¾	4⅜
10½	8⅛	100	8⅛	8⅛	8⅛	Red Bank Oil	(sh)	250,000	N.P.	.....	.....	24⅜	7	18	4⅞	16	9⅜
5⅜	2⅛	1,400	3⅝	3⅛	3¼	Reiter-Foster	(sh)	388,584	N.P.	10cQ	12- 9-29	15½	3½	12⅞	4⅛	8½	1⅛
8⅝	3⅝	100	4⅛	4⅛	4⅛	Ryan Consolidated	(sh)	500,000	N.P.	...	.....	7	4½	12	4⅛	11	3
2½	1⅜	200	1¾	1¾	1¾	Salt Creek Consolidated	(sh)	1,286,300	$10	10cQ	1- 2-30	8	5¼	7¼	5½	5⅞	1⅞
15¼	8¼	200	11½	11½	11½	Salt Creek Producers	(sh)	1,496,859	$10	50cQ	2- 1-30	35½	27¼	35	23⅛	25⅞	9
1	½	100	½	½	½	Savoy Oil		$750,000	$5	.....	.....	7	1¼	3½	1	2½	⅛
						Transcontinental pfd.		.....	..	...	.....	..	..	..	..	..	..
No sales.						Venezuelan Petroleum	(sh)	755,090	$5	5cQ	11-15-29	7⅜	4¼	9⅛	4¾	6½	1⅜
4½	2	100	2½	2½	2½	Woodley Petroleum		$500,000	$1	.....	.....	7	4¾	8¼	4⅞	9½	2
5	2	100	4⅛	4⅛	4⅛	Y Oil & Gas		100,000	N.P.	.....	.....	6	1¾	8⅜	2⅛	2⅞	¼
2½	½	200	¾	¾	¾												

*Including one-half per cent monthly in stock. †Payable monthly and a monthly stock dividend of one-half per cent. x Ex-dividend.

STANDARD OIL STOCKS ON NEW YORK CURB

Quotations compiled by Francis, Bro. & Co., Associate Members of New York Curb, Kennedy Building, Tulsa, Okla.

1930 High	1930 Low	Week ended August 6 Sales	High	Low	Close	Stocks—		Outstanding capital	Par value	Div. rate	Last paid	1927 High	1927 Low	1928 High	1928 Low	1929 High	1929 Low
18½	12¼	400	18½	18⅜	18½	Anglo-American Oil (vot. C.O.D.)		£4,192,635	£1	.36⅞	11-27-29	21⅝	17⅞	22⅜	14⅞	17	11
1	⅜	200	½	½	½	Atlantic Lobos											
25	14	100	17	17	17	Borne Scrymser		$1,000,000	$25	$1SA	10-15-29	59	50	56½	44½	46½	25
69	55¼	100	55	55	55	Buckeye Pipe Line		$10,000,000	$50	$1Q	12-14-29	60	45	76	53	74¼	55
184⅞	140⅜	100	154¾	154¾	154¾	Chesebrough Mfg.		$3,000,000	$25	$1Q*	12-30-29	126	76½	161	117	210	130
17¾	10	500	10	10	10	Continental Oil (V.T.C.)		$36,057,840	$10		12-15-27	22⅝	16¼	23	16	29	10
65¾	30½	100	36	36	36	Cumberland Pipe Line		$1,500,000	$50	$1Q	12-15-29	137	89	114	67	75¾	40
54¾	39	100	39	39	39	Eureka Pipe Line		$5,000,000	$100	$1Q	11- 1-29	68½	47	88	64⅛	70½	42
7	2½	200	4⅛	4⅛	4⅛	Galena Oil Corp.		$16,000,000	$100			13½	3½	13	4¼	6½	3
119	78	100	89⅝	89½	89½	Humble Oil & Refining		$74,103,300	$25	50cQ	1- 1-30	68½	54	114¾	59¼	128	74⅛
320	303	100	320	320	320	Illinois Pipe Line		$20,000,000	$100	$10SA	12-16-29	182	123¾	290½	176½	340½	260
30	18⅛	600	20½	20⅛	20¼	Imperial Oil of Canada (new)	(sh)	26,421,768	N.P.	12½cQ	12- 2-29	64¾	37¾	104	56¾	41	22
41	31⅞	500	32¼	32	32	Indiana Pipe Line		$3,000.000	$10	50cQ‡	2-15-30	94½	61	91⅞	74⅜	41⅞	26
24	17⅝	1,200	19⅜	19¼	19¼	International Petroleum	(sh)	14,247,088	N.P.	12½cQ	12-16-29	29	28¼	55	35	30⅜	15
22⅜	15⅛	800	16¾	16¾	16¾	National Transit		$6,362,500	$12.50	25cQ‡	12-16-29	24	13½	32⅜	19⅜	25⅛	10½
21⅝	10⅛	100	15⅛	15	15	New York Transit (new)		$1,000,000	$10	40cQ†	1-15-30	44½	31¼	75	38½	17½	10
54	35½	50	37½	37½	37½	Northern Pipe Line		$2,000,000	$50	$2SA	1- 2-30	100	70	69	56½	63	41
76⅜	62⅛	200	64⅝	64⅝	64⅝	Ohio Oil Co.											
32	17	100	24	24	24	Ohio Oil (new W.I.)		$60,000,000	$25	5cQ‡	12-14-29	67⅞	52	84	58½	79⅞	64⅛
23	14⅝	200	14⅝	14⅝	14⅝	Penn Mex Fuel		$10,000,000	$25	50cQ	12-14-29	39	12	84	28	44½	20
20⅞	13	200	18¼	18	18	Solar Refining		$4,000,000	$25	$1.25SA	12-20-29					50	29
45⅞	35	200	37	36½	36½	Southern Pipe Line		$1,000,000	$10	5cQ		27¼	15½	19	15	22½	13
65	35	100	45¼	45¼	45¼	South Penn Oil (new)		$30,000,000	$25	50cQ	12-30-29	41½	35	71⅞	36¾	60¼	35⅛
59⅞	47⅝	1,900	50⅞	50⅝	50⅝	Southwest Pennsylvania Pipe Lines		$1,750,000	$50	$1Q	1-10-29	83	55½	102	70	70	60
40½	30⅛	900	32	32	32	Standard Oil of Indiana		$348,175,069	$25	62½cQ‡	12-16-29	81½	64¾	95⅞	70⅞	63	45
48⅞	44⅛	100	47⅝	47⅝	47⅝	Standard Oil of Kentucky		$25,654,516	$10	40cQ	12-16-29	130	111½	179¾	122¼	46⅞	29
108½	77	100	79¾	78½	79¾	Standard Oil of Nebraska		$4,649,225	$25	62½cQ‡	12-20-29	49½	40	54⅞	39⅞	50¼	40
10	7	100	7	7	7	Standard Oil of Ohio		$14,000,000	$25	62½cQ	1- 2-30	87½	72	134	71	129	60
97⅞	76¼	300	85½	85⅛	85⅛	Swan-Finch Co.		$861,466	$25		12- 2-29	21	14½	23½	16	18	10
34⅛	32½	600	32¾	32⅝	32⅝	Vacuum Oil Co.		$126,180,350	$25	$1Q	12-20-29			111	72	133¾	75

*Plus 50 cents extra. †Plus 10 cents extra. ‡Plus 25 cents extra. x Ex-dividend.

TRANSACTIONS IN OIL SHARES ON NEW YORK STOCK EXCHANGE

Quotations Compiled by Francis, Bro. & Co., Members of the New York Stock Exchange and Associate Members of New York Curb, Kennedy Building, Tulsa, Okla.

1930 High	1930 Low	Week ended August 6 Sales	High	Low	Close	Stocks—		Outstanding capital	Par value	Div. rate	Last paid	1927 High	1927 Low	1928 High	1928 Low	1929 High	1929 Low
31½	18	200	25	25	25	Amerada Corp.	(sh)	922,075	N.P.	50cQ	1-31-30	37⅝	27⅝	43⅞	27⅛	42⅝	17½
37	15¼	300	19¾	19⅛	19⅛	American Republic Corp.	(sh)	209,180	N.P.		3-20-29	82½	35⅛	85	51⅜	64⅜	12½
51	32½	10	40	40	40	Associated Oil		$57,260,300	$25	50cQ	12-31-29	50¼	35	53⅜	37½	47¼	34½
51⅜	30⅛	1,000	37¼	37	37	Atlantic Refining		$66,763,775	$25	25cQ	12-16-29	131⅜	104	66⅜	50	77⅞	36
34	20½	400	23⅞	23½	23½	Barnsdall Corp. A		$56,546,600	$25	50cQ	12- 7-29	35½	20¾	54	20	49⅛	20
30½	18⅜	4,300	21⅛	20⅝	20⅝	ContinentVal Oil of Delaware	(sh)	4,741,554	N.P.		3-31-27					47⅛	18
71¼	38⅝	400	46	45¾	46	General Asphalt	(sh)	413,333	N.P.	50cQ		96¾	65	94⅞	68	94¾	42¼
116⅞	52¼	7,700	86⅛	84	85	Houston Oil		$24,968,600	$100			175¾	60⅛	167	79	109	26
39	19⅜	400	21½	21⅛	21½	Independent Oil & Gas	(sh)	1,362,295	N.P.	50cQ	1-31-30	32¾	17⅝	38⅜	21¾	39⅜	17¾
28⅜	8¾	800	12⅞	12¾	12¾	Indian Refining		$12,565,070	$10		5-31-24	12⅛	7⅝	39⅝	9	53	13⅛
29½	21¼	300	29	28⅞	29	Lago Oil & Transport	(sh)	3,992,122	N.P.		5- 1-27	37¾	20½	39⅛	27⅜	38⅜	16½
12	8	1,000	9	9	9	Louisiana Oil Refining	(sh)	1,190,063	N.P.			18¼	10	19¾	9⅜	18	7
10⅜	4½	200	5	5	5	Maracaibo Oil	(sh)	330,000	N.P.			22¾	12	25½	12½	18½	5⅛
37	16⅛	4,500	23¼	22⅝	22⅝	Mexican Seaboard	(sh)	1,244,383	N.P.		12-15-20	9¼	3	72	4⅝	69⅜	8¼
33	22⅛	400	24	24	24	Mid-Continent Petroleum	(sh)	1,857,912	N.P.	50cQ	12-15-29	39⅜	25½	44½	25⅛	39⅞	22⅛
2½	⅞	300	1⅛	1	1	Middle States ctfs.		$23,736,130	$10		7- 1-23	3¾	1⅝	7⅜	2⅜	5⅛	¾
64¼	51⅝	200	59⅛	59⅛	59⅛	Pan American P. & T.		$50,084,700	$50		10-20-27	65⅞	40⅛	50⅞	38¼	69	40½
67½	50½	600	59	58¾	58¾	Pan American P. & T. "B"		$121,110,650	$50		11-15-24	66⅜	40¼	58⅞	37⅜	69¼	40½
..	..	No sales.				Pan American Western "B"		400.000	N.P.		1-30-27	37⅞	16¾	28⅜	15½	18½	13⅝
12¾	4⅛	200	7½	7¼	7½	Panhandle P. & R.	(sh)	199,370	N.P.			18⅞	8	21⅜	11½	15¼	3
80	47½	100	72	72	72	Panhandle P. & R. pfd.		$2,564,400	$100		7- 2-23	83	54	108	70	76	47½
44¾	29⅛	4,500	33⅜	32¾	33⅜	Phillips Petroleum	(sh)	2,593,075	N.P.	50cQ	1- 2-30	60¼	36¼	53⅞	35¼	47	24¼
..	..	No sales.				Phillips Petroleum rts.											
2½	1	200	1⅛	1	1	Pierce Oil Corp.		$29.622,831	$25			1⅛	½	5¼	½	3⅜	1
7⅛	2¼	200	5⅜	5⅜	5⅜	Pierce Petroleum	(sh)	2,500,000	N.P.			5½	2½	7	3½	5⅞	½
54	35⅝	100	37¼	37¼	37¼	Prairie Oil & Gas		$60,848,000	$25	50cQ*	12-31-29	55½	45⅝	68	46	65⅝	40½
60	44⅛	300	45⅞	45⅞	45⅞	Prairie Pipe Line		$101,250,000	$25	75cQ†	12-31-29	190	130¾	280	172	65	45
11⅞	6½	1,400	8	8	8	Producers & Refiners		$37,438,950	$50		9-15-23	33⅞	16¾	29⅞	16	25⅞	4
40	30	80	32	32	32	Producers & Refiners pfd.		$2,845,350	$50		5- 1-25	50	36⅞	49⅝	41	46⅜	25½
27¼	19½	1,400	21⅞	21¾	21⅞	Pure Oil		$75,959,250	$25	37½cQ	12- 2-29	33½	25	31⅝	19	30¾	20
28¼	14¾	2,600	17	16½	16½	Richfield Oil		$52,410,875	$25	50cQ	11-15-29	28⅝	25⅜	56	23	49⅝	20
25¾	15⅝	400	17	16½	16½	Rio Grande Oil	(sh)	1,236.270	N.P.	$2A	7-25-29			37½	32	42½	15
56½	49⅛	700	52¾	52½	52½	Royal Dutch, N. Y.	(sh)	611,303	$1.873		9-13-29	54½	44¼	64	44⅝	64	43⅛
48⅜	42⅜	80	44⅛	44⅛	44⅛	Shell Transport & Trading Co.		£23,985,000	£1	$1.45	7-23-29	48⅝	40½	47⅞	41⅜	51½	40⅝
25½	18	700	19⅜	19¼	19¼	Shell Union Oil	(sh)	13,066,497	N.P.	35cQ	12-31-29	31¾	23⅝	39¼	23¼	31¾	19
37	18	500	21½	21	21	Simms Petroleum		$8,353,620	$10	40cQ	12-14-29	25⅜	14¼	27¼	18¼	40⅛	15
32	20	3,800	25	24½	24½	Sinclair Consolidated	(sh)	5,500,000	N.P.	50cQ	1-15-30	22⅜	15	46¾	17⅜	45	21
112¼	108	100	110	110	110	Sinclair Consolidated pfd.		$16,025,250	$100	$2Q	11-15-29	104½	97	110	102½	111	103
42	28½	200	29¾	29¾	29¾	Skelly Oil		$27,441,250	$25	50cQ	12-16-29	37⅜	24⅛	42⅝	25	40½	28
75	55½	1,200	64⅛	63½	63½	Standard Oil of California	(sh)	12,594,098	N.P.	62½cQ	2-15-30	60¾	50⅜	80	63	81⅞	51½
49	29	100	33	33	33	Standard Oil of Kansas		$8,000,000	$25	50cQ	12-16-29	20⅞	14⅝	37¾	15	33¾	18
84⅞	58	45,200	73¼	71¾	71⅞	Standard Oil of New Jersey		$634.999.200	$25	25cQ*	12-16-29	41⅜	35⅛	59⅜	37¾	83	49
40⅜	30	700	32⅜	32⅛	32⅛	Standard Oil of New York		$445,223.675	$25	40cQ	12-16-29	34⅛	29¾	33¼	28¾	48⅛	31¾
70	50	100	58⅞	58⅞	58⅞	Sun Oil	(sh)	1,416,869	N.P.	25cQ	12-16-29	34⅞	30	77	31½	68⅜	55
9⅜	2	2,700	3⅜	3⅛	3¼	Superior Oil Corp.	(sh)	776,979	N.P.		12-20-20					24	5¼
60½	50⅛	9,000	53⅛	52½	52⅞	The Texas Corp.		$246,204,900	$25	75cQ	1- 1-30	58	45	74¾	50	71⅞	50
14½	8¼	1,000	9⅛	9	9	Texas Pacific Coal & Oil Co.		$9,304,890	$10	2½% A‡	12-31-29	18⅞	12	26⅝	12⅛	23⅞	9½
31	19½	200	30¾	28¾	30¾	Tide Water Oil	(sh)	2,191,759	N.P.	20cQ	12-31-29	29⅛	19	41½	19⅝	40	14
94⅞	83	100	90	90	90	Tide Water 5½% pfd.		$19,947,000	$100	$1.25Q	11-15-29	90⅛	85	100⅛	86	97½	85⅛
17¾	10¾	1,700	14¼	14	14	Tide Water Associated	(sh)	5,560,424	N.P.	30cS	2-15-30	19⅛	15¾	25	14¾	23½	10
89¾	79	100	86¼	86¼	86¼	Tide Water Associated pfd.		$73.284.500		$1.50Q	2- 2-30					90⅞	74⅛
24	16¼	4,000	18¼	18	18	Transcontinental Oil	(sh)	3,742,029	N.P.			10⅜	3¾	14¾	7¼	15¼	5⅛
50	37	500	41	41	41	Union Oil of California		$104,342,375	$25	50cQ	11- 9-29	56½	39⅝	58	42⅜	57	42⅛
38½	25¼	600	28	28	28	Union Tank Car	(sh)	1,254,048	$100	$1.25Q	12- 2-29	127½	94	128⅛	110	163¾	121⅞
27	12¾	300	13½	13½	13½	Warner-Quinlan	(sh)	632,948	N.P.	50cQ	1- 2-30	34½	24½	44⅞	26	42⅞	15
		No sales.				White Eagle Oil & Refining	(sh)	505.100	N.P.	50cQ	1-20-30	27½	20	38	20⅛	38	25
21	11½	100	16½	16½	16½	Wilcox Oil & Gas	(sh)	428,907	N.P.		5-10-28					29¾	12⅞

*Plus extra dividend of 25 cents. †Plus extra dividend of 50 cents. ‡Payable in stock. x-Ex-dividend.
In comparing highs and lows for the several years in the three tables, it will be necessary to take into consideration cases where there have been splits in the stock.

WILDCAT SOUTHEAST OF VAN FIELD JOINS THE RANKS OF THE DUSTERS

By L. E. Bredberg
Fort Worth Bureau, The Oil and Gas Journal

FORT WORTH, Tex., Aug. 11.—Another interesting test which looked quite favorable for production has gone the way of the majority of wildcats, joining the ranks of the dusters. This is McElreath & Suggett's No. 1 Gilliam in the J. C. Robertson Survey, in Smith County, about 7 miles southeast of the Van Field. The owners are now plugging it at a total depth of 4,010 feet.

The discovery well of the Van Field, Van Zandt County, Pure Oil Co.'s No. 1 Jarman, which was completed on October 14, 1929, at a total depth of 2,710 feet flowing 146 bbls. the first hour, and 1,780 bbls. the first 24 hours, has been deepened to 2,947 feet and made an estimated 2,665 bbsl. in 24 hours, this estimate based on a 3-hour test. The well flowed several months, then was put on the pump, and has been pumping up to the time it was deepened.

No locations were made in the field last week, and drilling activities had been slowed up for some time because of lack of water, but when sufficient water was brought in last week for all production purposes, activities were again resumed. Twenty locations were staked in the field this week, several of them being edge locations and exceptionally interesting tests for the field.

The Central proration committee, which made recommendations to the Railroad Commission of the State for statewide proration, formerly recommended that the Van Field be held to 25,000 bbls. per day, the amount which it has been producing for several months, but operators in the pool and producing companies holding potential producing acreage and now producing in the Carroll district, which is the name applied to the area northeast of Unit Plan No. 1, which was recently opened and extended by the Humble Oil & Refining Co. in its producing well on the Carroll farm, have asked that 2,500 bbls. be allowed this district daily, raising the total of the Van area to 27,500 bbls. per day. This will probably be granted.

C. E. Kolp and others' No. 1 Matthews, in the southeast corner of a 27-acre tract off the west end of the Matthews 58.66-acre farm in the north part of the Willis H. Bruce Survey, about 10,000 feet west of the south end of the Van Pool, Van Zandt County, will be an interesting test in this direction, although the acreage to the northeast of this near the small Crim producer, and another dry hole on the Crum 48.5-acre farm, has been ostracised to production by these two tests.

Imperator Oil Co.'s No. 1 Luther, in the north part of the M. Gross Survey, north of the Van Field, Van Zandt County, topped the Pecan Gap chalk at 1,653 feet, and topped the Austin chalk this week at 2,630 feet. It has an elevation of 447 feet. It is now drilling at 2,700 feet. This test was formerly put on the pump in an effort to make a Nacatosh sand producer from 1,138-55 feet where it had a good showing of oil, but this failed, and now it will be drilled to the Woodbine sand, from which the Van Pool is producing.

East Central Texas Production

Daily average production of the pools in the East Central Texas area for the week ending August 9 follow:

EAST CENTRAL TEXAS	
Boggy Creek	3,825
Cedar Creek	55
Currie	250
Hill County	35
Mexia	4,271
Minerva	560
Nigger Creek	195
Powell	5,494
Richland	180
Thrall	40
Van	24,916
Wortham	80
Total	39,901
Week ending August 9	41,960
Decrease	2,059

COMPLETIONS IN EAST CENTRAL TEXAS

Week Ending August 9

Smith County

Sutton and others' No. 1 W. D. Hammond, dry and abandoned, total depth 4,295 feet.

Van Zandt County

The Texas Company's No. 1 W. H. White, initial production 303 bbls. the first 24 hours, total depth 2,931 feet.

EAST CENTRAL TEXAS WILDCATS

Week Ending August 11

DELTA COUNTY

C. A. Everts' No. 1 Smith, 300 ft. N and 150 ft. W of 38-ac. tract, 3 miles NE of Cooper in J. U. Ranfro Sur. ..... Shut down 978 ft.

FANNIN COUNTY

North American Pet. Co.'s No. 1 Allen, 700 ft. N and 150 ft. W in N. R. Broadfoot Sur., 9 miles N of Honeygrove ..... Shut down 977 ft.

E. M. Rogers' No. 1 McSwain, 300 ft. S and E of Michael Daly Sur., in Juana Telgando Sur., 1½ miles NE of Lomasco ..... Shut down 1,350 ft.

HENDERSON COUNTY

H. E. Ashburn et al's No. 1 T. E. Barry, center of Barry's 59-acre tract in A. York Sur. ..... Shut down 2,510 ft.

L. G. Bradstreet's No. 1 Julia J. Shaunessy, 2,776 ft. from N and 300 ft. from W of Sur. or farm, John Isard Sur. ..... Shut down 1,968 ft.

Chapman's No. 1 Cade, 1,662 ft. from N and 3,294 ft. from W of J. B. Dorsey Sur. ..... Shut down 3,060 ft.

Cranfill & Germany's No. 1 Clara C. Stow, 2,203 ft. from N and 471 ft. from S of Guadalupe Acosta Sur. ..... Drlg. 3,898 ft.

George Pace et al's No. 1 Mrs. Sarah Anthony, 273 ft. N and 132 ft. W of SE cor. of S. Anthony 632-ac. tract, Jose W. Battvan Sur. ..... Shut down 1,205 ft.

Sunray Oil Co.'s No. 1 Davis, 600 ft. S and W of most easterly NE cor. of 164-ac. tract, Eldridge Harris Sur. ..... Drlg. 2,545 ft.; top Pecan Gap 2,536 ft.

HUNT COUNTY

Branson et al's No. 1 West, 350 ft. N, 350 ft. W of W 60-ac. tract, Jas. Rooces Sur. ..... Shut down 2,910 ft.

KAUFMAN COUNTY

Shaw & Alexander's No. 1 Barrow, 2,360 ft. S and 200 ft. W of R. A. Terrell Sur., 4½ miles N of McCoy ..... DDrlg. 1,110 ft.; top Pecan Gap 1,080 ft.

LAMAR COUNTY

Everett & Allen's No. 1 Guest, 250 ft. S and 2,046 ft. E of 100 -ac. tract, L. Roberts Sur. ..... Spudded and shut down

NAVARRO COUNTY

Killam & Phillips' No. 1 Wilson, 150 ft. S and E of 62½-ac. tract in Wm. Bridges Sur. ..... Drlg. 2,310 ft.

Navarro Oil Co.'s No. 2 Mathews, 3,600 ft. from S and 1,140 ft. from W of Smith Sur., 3 miles E of Dawson ..... Shut down 1,550 ft.

Young et al's No. 1 Farmer, 700 ft. from S and 400 ft. from E of 110-ac. farm in F. Finley Sur. ..... Shut down 960 ft.

RAINS COUNTY

Everett & Morrison's No. 1 Franklin, 640 ft. from S and E of 75-ac. tract in John Christian Sur., 6 miles SE of Emory ..... Spudded and shut down

Owens & Sloan's No. 1 Hill, 150 ft. out of NW cor. of 150-ac. tract, T. McMahon Sur. ..... Drlg. 4,472 ft.

RUSK COUNTY

Clem S. Clark's No. 1 Maude R. McCaffiin, 427 ft. from N, 166 ft. from W of farm, Ellie Blackburn Sur. ..... Building derrick.

Mass et al's No. 1 Mathews, 2,244 ft. from N, 4,356 ft. from E, Dalines Cartinas Sur. ..... Shut down 2,338 ft.

SMITH COUNTY

McElreath & Suggett's No. 1 J. Gilliam, 200 ft. from N and 200 ft. from W of Gilliam 78-acre tract, J. C. Robertson Sur. ..... Top Pecan Gap 3,430 ft.; base Pecan Gap 3,608 ft.; shut down 4,010 ft.

Owens & Sloan Oil Co.'s No. 1 Starnes, 846 ft. along W lines of John Waller Sur. from NE cor. of J. O. Dillard Sur., and 80 ft. E at right angles to W line of J. Waller Sur. ..... Shut down 1,600 ft.; repairs.

Winona O. & G. Co.'s No. 1 Freeman, 150 ft. from S, W of 89-ac. tract in A. J. Lagrone Sur., 4 miles SE of Winona ..... Shut down 2,730 ft.; top Taylor 2,666 ft.

VAN ZANDT COUNTY

Anderson's No. 1 Sanger, 150 ft. from N and W of Humble Sanger lease in John Walling Sur. ..... Shut down 582 ft.

L. R. Barton's No. 1 Wamble, 300 ft. from S and W of 100-ac. tract in Pleasant Young Sur. ..... Derrick.

Broderick & Calvert's No. 1 M. F. Shirley, 150 ft. from W in C of N and S lines of 2.1-acre strip, John Walling Sur. ..... Derrick.

E. L. Chapman's No. 1 Charles Wolverton, 215 ft. from N, 60 ft. S of NE cor. of Wolverton 10-ac. tract, William James Sur. ..... Drlg. 3,385 ft.

T. Daniels' No. 1 Fannie Cumbine, 185 ft. S and 175 ft. E of NW cor. 156-ac. tract, John Wright Sur. ..... Shut down 2,275 ft.

Dennis Oil Co.'s No. 1 C. W. Morris, 100 ft. from N and 300 ft. from E lines of Morris 160-ac. tract in C. L. Morris Sur., 5 miles SE of Ben Wheeler ..... T. D. 3,071 ft.; will abandon

Hartt Oil Oil Co.'s No. 1 Dr. L. M. Cox in A. C. Night Sur., 1,785 ft. N of S line and 524 ft. E of W line ..... Derrick.

H. Helms et al's No. 1 Bogue, 647 ft. W and 155 ft. S of SE cor. of J. M. Brown 70-ac. in Marshall University Sur., SE of Van ..... Rig up.

B. P. Hervey's No. 1 Foster & Smith, 150 ft. S and 150 ft. W of 104-ac. tract, Margaret Neal Sur. ..... Drlg. 3,929 ft.

Howard & Dooley's No. 1 Elliott 188-ac. tract in W. H. Bundy Sur. ..... Derrick.

Humble Oil & Ref. Co.'s No. 1 Ruth S. Blake, 640 ft. S line of most southerly SE cor. and 250 ft. E line of 201.4-ac. tract, John Walling Sur. ..... Location.

Humble Oil & Ref. Co.'s No. 1 L. A. Dowell, 1,027 ft. N of S line and 150 ft. E of W line, William Daniel Sur. .. Location.

Imperator Oil Co.'s No. 1 G. J. Luther, in SW cor. G. J. Luther 32-ac. tract ..... Drlg. 2,660 ft.

Imperator Oil Co.'s No. 2 G. W. Carter, 175 ft. from S and 35 ft. from W of G. W. Carter 171-ac. tract, William Daniel Sur. ..... Shut down.

Jenkins et al's No. 1 V. T. Davis, SE cor. of 139.5-ac. tract, Nacogdoches County School Land ..... Rig up.

Kolp et al's No. 1 Matthews, 150 ft. S and E of 27-ac. tract off west end of 58.66-ac. tract, Willis H. Bruce Sur. ..... Location.

Kraft & Kelsey's No. 1 Enas in vacancy strip on E side of Sam Allen and Wylie Enas farms in J. Prado Sur. .. Derrick.

Priest et al's No. 1 Blewitt, 175 ft. NW and SW of SE cor. of NW 84-ac. tract, E. Porter Sur. ..... Drlg. 2,772 ft.

Pure Oil Co.'s No. 1 W. E. Morris, 250 ft. N of S line and 200 ft. E of W line of John Walling Sur. ..... Location.

Pure Oil Co.'s No. 1 A. D. Clark, 200 ft. S of N line and 150 ft. W of E line Mund Gross Sur. ..... Location.

Pure Oil Co.'s No. 1 H. P. Tunnell, 200 ft. S of N line, 285 ft. W of E line James Pace Sur. ..... Location.

Pure Oil Co.'s No. 1 Humphreys, 225 ft. out of NE cor. of lease, A. McPhail Sur. ..... Location.

Pure Oil Co.'s No. 1 R. A. Howell, 825 ft. S of N line, 225 ft. E of W line, Mund Gross Sur. ..... Location.

Pure Oil Co.'s No. 1 J. D. Miller, 943 ft. E of W line, 735 ft. S of N line, John Walling Sur. ..... Location.

Pure Oil Co.'s No. 1 A. D. Clark, 672 ft. S of N line and 217 ft. E of W line, A. H. Wiley Sur. ..... Location.

Pure Oil Co.'s No. 1 O. L. Swain, 225 ft. W of E line and 200 ft. N of S line, John Walling Sur. ..... Location.

Pure Oil Co.'s No. 1 Mrs. J. E. Crumble, 748 ft. S of N line and 225 ft. E of W line, John Walling Sur. .... Location.

Pure Oil Co.'s No. 1 Mrs. W. A. York, 650 ft. S of N line and 225 ft. E of W line, John Walling Sur. ..... Location.

Pure Oil Co.'s No. 1 J. L. Petty, 250 ft. out of SE cor. Nacogdoches County School Land ..... Location.

Pure Oil Co.'s No. 1 W. F. Swain, 328 ft. N of S line and 176 ft. W of most westerly E line, Mund Gross Sur. .. Location.

Pure Oil Co.'s No. 1 B. E. Crim, 250 ft. S of N line and 200 ft. W of E line, John Walling Sur. ..... Location.

Pure Oil Co.'s No. 1 Davis, 127 ft. from S and 200 ft. from W of 139-ac. tract, Nacogdoches County School Land ..... Derrick completed.

Pure Oil Co.'s No. 1 W. F. Swain, 220 ft. from W line and 250 ft. from N line 48-ac. tract, John Walling Sur. ..... Coring 2,930 ft.

Pure Oil Co.'s No. 1 J. R. Shivers, 225 ft. W of E line, and 200 ft. S of N line of lease, John Walling Sur. ... Shut down 2,330 ft.

Pure Oil Co.'s No. 1 M. L. McMahon 48 acres, 150 ft. E of W line, 150 ft. S of N line of lease, John Walling Sur. ..... Rigging up.

Texas Chief Oil Co.'s No. 1 Foster, 600 ft. E of W line and 600 ft. N of S line of W. P. Foster's 151-ac. tract in F. Montgomery Sur., 7 miles south of Canton ..... Shut down 1,420 ft.

Van Zandt Oil & Dev. Co.'s No. 1 Robinson, located NE cor. of L'Barbo Sur., 4 miles E of Grand Saline .... Drlg. 4,588 ft.

WOOD COUNTY

Big Indian Oil Co.'s No. 1 R. J. King, 450 ft. W of E line and 150 ft. N of S line of King's 100-ac. tract in Wm. Barnhill Sur. ..... Shut down 4,569 ft.; Woodbine sand 4,569 ft.

OIL WELL STOCKHOLDERS TO ACT SEPTEMBER 9

(Continued from Page 144)

investment, now more than $12,000,000,000, E. B. Reeser, president of the American Petroleum Institute and of Barnsdall Corp., adduces statistics to show that profits to oil companies have not been exorbitant. The average yearly return on the aggregate net worth of 31 principal oil companies for the 13-year period, 1913-1925, Mr. Reeser states, was 11.5 per cent and the weighted average, taking into account the increase in net worth year by year, was only 9.9 per cent.

Total net worth of these oil companies at the end of each year, total net income and per cent return for the year is given as follows:

	Total net worth	Total net income	Pct. return
1913	757,162,000	136,758,000	18.1
1914	839,884,000	63,540,000	7.6
1915	860,265,000	100,756,000	11.7
1916	1,138,602,000	228,839,000	20.1
1917	1,424,052,000	236,718,000	16.6
1918	2,107,254,000	311,858,000	14.8
1919	2,790,989,000	298,188,000	10.7
1920	3,551,170,000	520,722,000	14.7
1921	3,661,573,000	156,816,000	4.3
1922	3,978,473,000	286,867,000	7.2
1923	3,971,609,000	221,155,000	5.6
1924	4,128,801,000	298,713,000	7.2
1925	4,189,135,000	450,565,000	10.8

Discussing profits in the war period, Mr. Reeser states: "The oil industry during the period 1913-1918 was called upon to meet not only the demand for essential products occasioned by the World War, but the requirements of this nation suddenly motorized."

Central America Importing More Oil

Coal Supplanted and Power Generated Almost Exclusively From the Imported Fuel, According to Department of Commerce

By Charles E. Kern
Washington Bureau, The Oil and Gas Journal

WASHINGTON, D. C., Aug. 11.—Central American countries are taking less coal, but more fuel oil, and power is generated almost exclusively from the imported fuel, according to a statement by John R. Bradley of the minerals division of the Department of Commerce.

Water power resources in Central America are placed at 4,800,000 horsepower, and the equivalent of 100,000 tons of coal has been produced in recent years, it was stated. Mexico is second to Chile in coal production among Latin-American countries but its output has shown a decline.

The republics of Central America and the British Colony of Belize, or British Honduras—an area of 215,276 square miles, with a population estimated in 1928 at 6,466,000—have no developed coal, petroleum or natural gas resources, and in 1926 only 38,400 horsepower was developed. Companies have been unsuccessful in prospecting for oil.

The greater part of the power has been generated from imported fuels, formerly coal but now fuel oil. Recent data indicate that the coal consumption of the Panama Canal region has declined to about 17,000 tons a year, and that water power approximating the equivalent to 100,000 tons of coal a year has been developed, and that oil fuel in a recent year was the equivalent of about 360,000 tons of coal. While the available data for the periods do not permit the segregation of coal and oil fuel used in bunkering vessels, it seems clear that power available for industrial use is much greater than in 1913, according to the report.

Owing to climatic conditions fuel is not required for heating purposes, and wood, coal, and charcoal supply domestic requirements, excepting Panama where manufactured gas, made from petroleum, is available.

Railroads Using Oil

The railways, estimated at about 3,600 miles, of which Honduras has 1,248, always have been the largest consumers of fuel, formerly coal, but now oil, supplemented in a few cases with wood.

In the British Honduras the consumption of coal has declined to about one-third of the total consumption of 15 years ago. The consumption of oil fuel is small and only about 100 bbls. of crude oil are imported per year.

No data are available for coal resources of Guatemala, and, therefore, it may be assumed that they are insignificant. Water power resources of the country have been estimated at 1,300,000 horsepower. There is no record of coal or petroleum production. Fuel and power in terms of coal, are now several times the 1913 figures, when coal furnished practically all, while oil fuel is now predominant, followed by water power. Guatemala has 669 miles of railway.

Salvador is without developed coal or petroleum resources and has limited resources of water power, estimated at 200,000 horsepower, of which 2,700 has been developed in 1926. It is the only Central American country where power available for consumption, although greater than in prewar years, appears to be declining. Coal imports during the years 1913 and 1920 to 1927 seldom reached 5,000 tons. Imports of oil fuel in 1925, 1926, and 1927 were 118,000, 69,000 and 62,000 bbls. respectively. The mileage of railways is 375.

There are no developed petroleum resources in Nicaragua. Water power resources have been estimated at 800,000 horsepower, of which 400 had been developed in 1926.

According to a recent report by Commercial Attache' G. C. Peek, Panama, Nicaragua has 10 central light and power plants, totaling 3,261 kilowatt capacity, of which 693 kilowatts are Diesel operated; 188 by water power; 380 water and Diesel; 1,300 steam, produced gas, and Diesel; and 700 steam, operated by a lumber company and probably generated by wood refuse.

Coal Imports Drop

Imports of oil fuel into Costa Rica in 1925 amounted to 298,130 bbls. and in 1926 to 206,444 bbls. Owing to the conversion of locomotives to oil burners imports of coal and briquets have steadily declined since 1913. In that year imports of coal and briquets amounted to 40,000 tons, chiefly used by railways. In 1927 receipts were only 5,000 tons and in 1928 less than 1,000 tons. The railways now operate 526 miles.

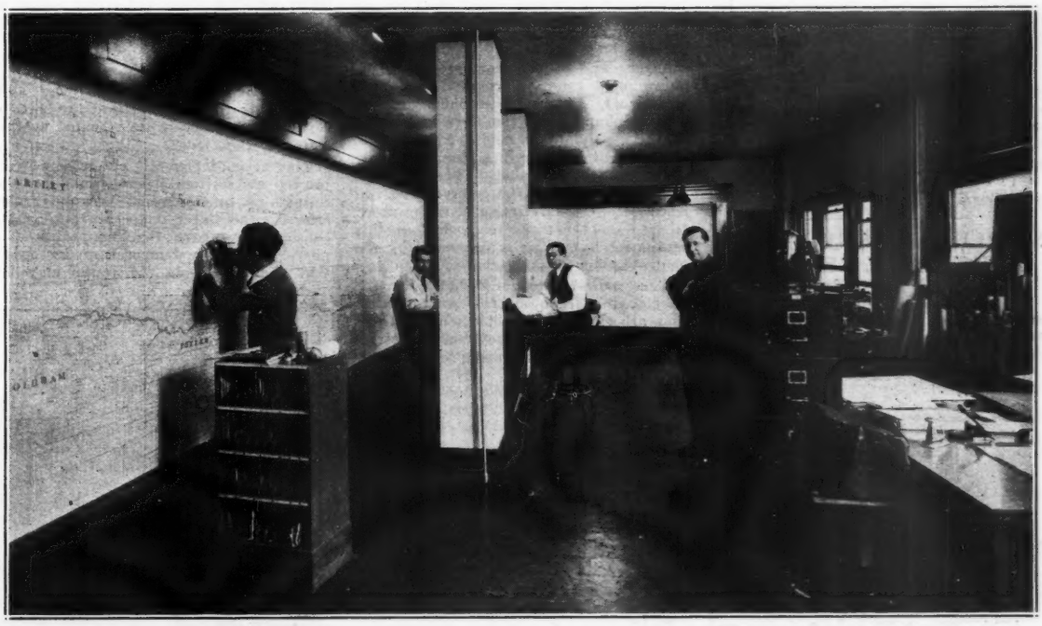
The water power resources of Costa Rica, confined chiefly to the western part of the republic, have been estimated at 1,000,000 horsepower, of which 15,000 had been developed in 1926. Many of the towns and all of the cities have hydro-electric power. There was doubtless little oil fuel or water power consumed in 1913. While imports of coal are now insignificant, the available power from imported oil fuel and water power is probably double that available from coal in 1913.

Imports of coal into the Republic of Panama are negligible. Fuel is not required for heating and charcoal and gas made from gas oil are used chiefly for cooking. Imports of oil fuel, which is used by the most important manufacturing concerns are increasing, and in 1925, 1926, and 1927, amounted to 52,878, 60,207 and 62,567 bbls. respectively.

In view of the increasing trade in bunker fuel oil on the Panama Canal, it is rather remarkable that coal sold as bunkers to commercial vessels has not decreased in quantity more than it has, the report states. The decline began in 1920 and continued until 1923 when the coal trade increased until 1929 when it reached 280,000 tons. This compares with the low decline to 199,000 in 1923.

Bunker oil sales show a somewhat similar scale of increase and decline. In 1922 the sales on the Panama Canal amounted to 2,489,000 bbls., then increased to 4,545,000 bbls. in 1923 and to 6,192,000 bbls. in 1924. In 1925 the declined to 4,828,000 bbls. but increased to 5,477,000 bbls. in 1926, and in 1928, and 1929 were 15,244,000 and 12,383,000 bbls. respectively. Last year they were approximately the equivalent of 3,095,000 tons of coal. The increase in sales of Diesel oil has been even more pronounced. In 1922 they amounted to only 69,000 bbls., showed a slight decline the following year, then gradually increased to 349,000 bbls. in 1926 and then advanced to 743,000 bbls. in 1928, and to 1,013,000

OIL MAP COVERS IMMENSE TERRITORY



What is said to be the largest single map ever made for the oil industry is now installed in the map room of Skelly Oil Co.'s land and lease department at Tulsa. It is shown on the left of the picture.

The map proper consists of three separate maps mounted together in one continuous sheet 25 feet and 3 inches wide and 84 feet from top to bottom.

The main map, on a scale of 1 inch to a mile, covers all of Kansas lying west of Range 9w, all of Colorado lying east of Range 58w and south of Township 1n, all of Oklahoma lying west of Range 10w, all of New Mexico lying east of Range 31e, all of Texas lying west of the east line of Eastland County, and as far west as the western part of Brewster County and north of the south line of Kinney County—an area approximately 300 miles wide, east and west, and approximately 730 miles north and south. This region includes approximately 224,792 square miles, or 143,866,880 acres—about one-twelfth of the area of the United States. It shows sections and land surveys, producing oil and gas wells, dry holes and their depths, and drilling wells. In the active producing and wildcat areas is also shown ownership of land and leases. This map alone is 64 feet from top to bottom.

Above the main map in the upper right-hand corner, is a map of the southern part of central Kansas on a scale of 2 inches to the mile. It also includes a strip 4 miles wide in northern Oklahoma, showing the relationship of lands across the state line. The total area covered extends from the north line of Township 17 in Kansas to the south line of Township 29 in Oklahoma, and from the west line of Range 11w, in Kansas to the east line of Range 2e. The total number of square miles included in this map is 8,094 and the map measures 13x18 feet. This brings the total area of the two detailed maps up to 232,856 square miles.

In the upper lefthand corner, above the main map, is a special section of George F. Kelly's petroleum executives' map, covering an area extending east to Birmingham, Ala., west to El Paso, Tex., south to the Gulf of Mexico and the Mexican border and north to the Canadian border. It measures 12x18 feet and is drawn on a scale of 1 inch to 8 miles. It shows all townships and range lines and numbers, producing oil and gas fields, railways, towns and cities, oil pipe lines and refineries. It covers more than one-third of the total area of the United States.

Four hundred yards of cloth, 42 inches wide, were used in the printing of the entire map. It was printed in 275 section. These were matched and wet-mounted on a continuous cloth back, making it practically a one-piece map. In addition to the 84 feet of map a blank section 16 feet long is attached at each end, making the entire sheet 116 feet long.

The map operates on its upper and lower rollers by means of an electric motor.

Standing in the right center of the picture is Barney E. Hays, chief scout for the Skelly Oil Co., who superintends the job of keeping the map information up to date.

bbls. in 1929. In 1929 the price of bunker coal at Cristobal was $8 per long ton, and oil, $1.50 per barrel.

Mexican Railways Turn to Fuel Oil

Although Mexico is the second largest coal producer in Latin-America, practically all of the railways, of which there are 23,496 miles, now use oil fuel. As late as 1924 the national production of fuel oil was utilized almost entirely for locomotive boilers.

Paralleling similar conditions in parts of the United States, oil fuel has displaced coal in Mexico to a large extent and now, in turn, is being partly displaced by natural gas imported from the United States, more particularly in the important industrial center of Monterey.

It appears that the coal consumption in Mexico is about one-third that of prewar years, it is said in the report. However, the republic now meets the greater part of its coal requirements and practically all of its coke.

Mexican production of crude petroleum amounted to 25,696,000 bbls. in 1913, reached its peak at 194,755,000 bbls. in 1921, and then gradually declined to 50,151,000 bbls. in 1928. It is probable that Mexico still has important petroleum resources untouched, according to the report.

No data are available for fuel oil consumption in Mexico in prewar years. In 1926 consumption by industries, not including the petroleum industry, was reported as 118,000 bbls. of gas oil and 3,185,000 bbls. of fuel oil; in 1927, as 91,000 bbls. and 3,927,000 bbls., respectively. There was not, therefore, sufficient oil fuel consumed to offset the decline in coal consumption. In 1928, however, sales, not including exports or refinery consumption, of fuel and gas oil from native production, amounted to approximately 6,000,000 bbls.

Few data are available on the extent of oil bunkering at Mexican ports and none on coal, bunkering of which must be very small, the report shows. Oil bunkers in Tampico district in 1922 were reported as 5,894,000 bbls. All but one or two of the important railways are government owned.

SIMPLIFY PRESSURE DISTILLATE RERUNNING

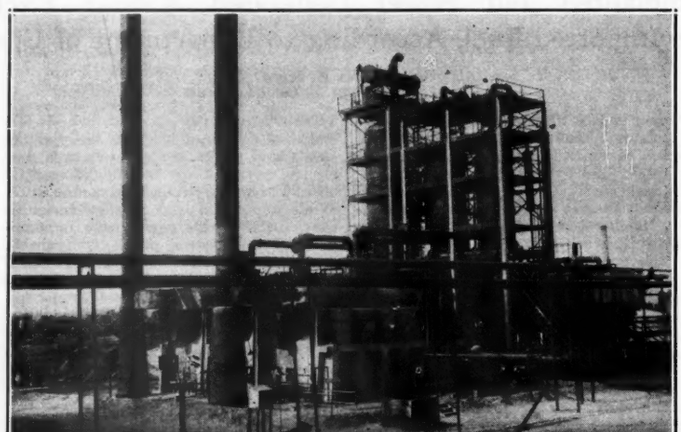
(Continued from Page 46)

still. The sprays are directed toward the bottom plate of the still to agitate the liquid. The steam not only decreases the vapor pressure of the liquid, but prevents the deposits of coke and insures a more even temperature throughout the mass. The quantity of steam used depends on the specifications of the overhead, but usually amounts to 17 to 22 pounds per barrel on the charge to the battery. The steam is furnished to the stills by a thermocompressor. Of the total steam used, about one-half of the amount is exhaust steam from other parts of the plant.

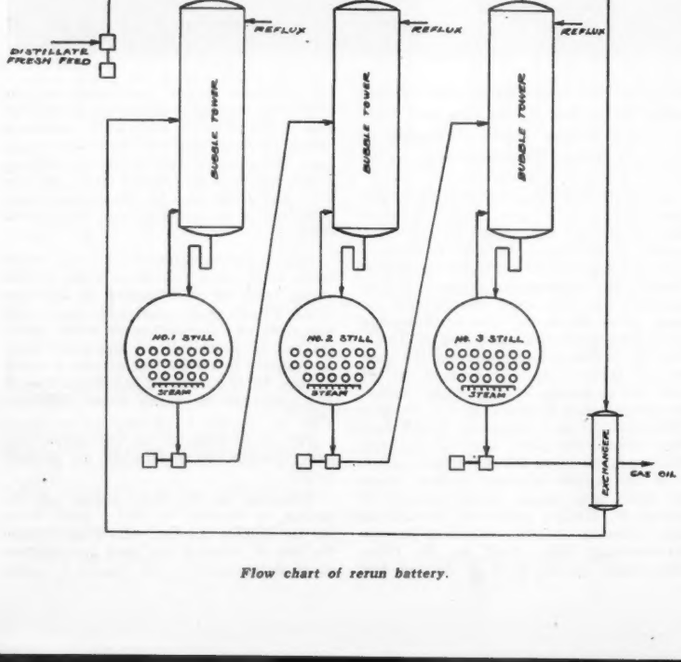
The distillate feed stock to this unit has been treated with acid and caustic, but the heat picked up in the heat exchangers and stills decomposes the sulphuric acid esters (formed during acid treatment), liberating sulphur dioxide. This sulphur dioxide combines with water to form sulphurous acids. Ammonia is sprayed in the vapor lines from the stills to neutralize this acid. This ammonia treatment stabilizes the color of the finished gasoline and gives neutral product. It is found that the corrosion in this equipment is materially decreased by the neutralization of this acid.

These stills are usually shut down the first part of each month. At this time they are cleaned, inspected and repaired. An accurate check is kept on the corrosion of the equipment, and provisions are always made to prevent an intermediate shutdown of the battery.

Automatic controls have been so arranged that only one man is required to operate this battery with a throughput of 7,000 bbls. per day.



Rear view showing tubular shell stills of simplified pressure distillate rerun unit.



Flow chart of rerun battery.

MANY METHODS OF SECURING COOL WATER

(Continued from Page 41)

to the top of the tower and it falls vertically, striking upon projecting surfaces in the upper portion of the tower, and in so doing gives up part of its heat to the air within the tower. This heated air will rise because it is lighter than the atmospheric air outside the tower and by so doing air is drawn in at the bottom of the tower to be in turn heated by the water.

This type of tower is tight except for the top and bottom openings and its usefullness is quite limited because to be effective the water temperature must be considerably above that of the atmospheric dry bulb temperature in order that the air inside the tower may be sufficiently heated to produce a draft head necessary to overcome the resistance of the wetted surfaces and the falling water.

The wetted surfaces not being easily cleaned will in time become fouled and thereby increase the air flow resistance and further reduce the efficiency of the device.

To secure capacity such towers must be built quite high, averaging about 80 feet, and such structures offer many mechanical difficulties in making them self supporting under wind loading without adding too greatly to the expense of building. They also offer difficulties in keeping them in good state of repair.

The air velocity within the tower even under the best of conditions of operation is so low that it does not penetrate into the center of the mass of water falling within the tower and as a consequence most of the air will channel along the periphery of the water stream and not penetrate to the center of it.

This type of tower has found its principal use where a low water temperature was not necessary and where the load factor was lightest in the hot summer months, such as in electric light plants operating with low vacuum.

Forced Draft Tower

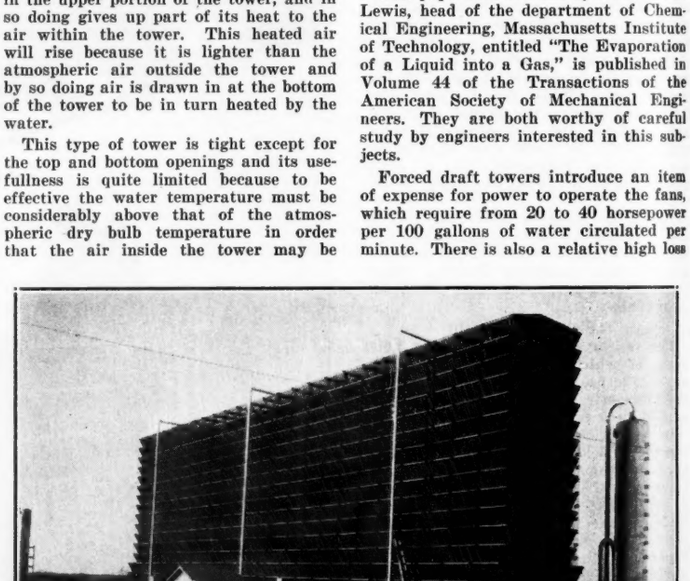
Having found the various inherent defects in the chimney type cooling tower it was only natural that the engineer should apply forced draft at the bottom of a tower of this type to replace the natural draft of the chimney tower and in this way increase the efficiency of operations and at the same time be able to control air volume as desired.

C. S. Robinson, department of Chemical Engineering, Massachusetts Institute of Technology, Cambridge, Mass., in a paper presented before the annual meeting of the American Society of Mechanical Engineers, December 4 to 7, 1922, on "The Design of Cooling Towers," says in a preface:

". . . Engineers have designed cooling towers in the past on empirical information and in accordance with the experience of previous successful designs. Wide departure from standard designs is difficult because of the lack of scientific basis for the design. The author therefore establishes the general principle applicable to cooling-tower design and derives equations for the use of his formulas and shows by an actual experiment how these formulas are applicable to the design of a countercurrent cooling tower."

This paper and also one by Prof. W. K. Lewis, head of the department of Chemical Engineering, Massachusetts Institute of Technology, entitled "The Evaporation of a Liquid into a Gas," is published in Volume 44 of the Transactions of the American Society of Mechanical Engineers. They are both worthy of careful study by engineers interested in this subjects.

Forced draft towers introduce an item of expense for power to operate the fans, which require from 20 to 40 horsepower per 100 gallons of water circulated per minute. There is also a relative high loss of water by windage from the high velocity of air passed through the tower against the falling stream of water and in congested industrial districts this mist falling on other property is sometimes objectionable.



New type cooling tower installed at gasoline plant in Oklahoma.

Open Atmospheric Type Cooling Tower

This type of cooling tower has been extensively used in the petroleum industry because of its simplicity of design and relative high efficiency and since its first introduction in the eastern part of the United States has steadily gained favor for gasoline plants and refinery operations.

While water in free contact with the atmosphere cannot be cooled lower than the temperature shown by the wet bulb thermometer it has been found that properly designed and operated louvre type towers will give high efficiencies, and Kent's handbook gives the following for-

mula for estimating the work done by towers of this type:

$$T_1 = \left[\left(\frac{1.9385}{(A/W)^{1.057}} + 1.53\right)R + t\right] \div \left[\left(\frac{1.9385}{(A/W)^{1.057}} + 1.53\right)R/100 + 1\right]$$

where A/W equals the ratio of air to water by weight; R equals the cooling range in degrees Fahrenheit; T_1 equals $(t+2t_1+T)/4$, where T is the temperature of entering water and T_1 is temperature of leaving water; t is dry bulb temperature and t_1 is temperature of wet bulb temperature, all in degrees Fahrenheit.

Psychrometric charts have been prepared that will show the humidity when the wet and dry-bulb temperatures are known, or knowing the humidity the wet-bulb temperature can be determined.

For any set of known conditions it is therefore possible to determine quite accurately the performance of cooling towers of this type. The air which enters the tower and spray falls in temperature to practically that of the water, thus giving off heat. The moisture, which was carried away in the air, absorbed heat in the process of vaporization. This heat was furnished not only by the air and its original moisture content but also by the coils just below the spray.

Because of the demand for cooling towers of this type several companies are engaged in manufacturing them and each has its own special design but most of them use redwood and cypress for the framework and louvres and fasten these parts together with brass, copper, aluminum or cast iron nails, screws and bolts.

The advantages of a well-designed atmospheric type cooling tower are uniform distribution of water throughout the whole tower, ample air supply passing over this water, sufficient cooling surface to assure intimate contact between air and water, low water loss due to windage and low operating cost.

Cooling tower guarantees are established upon a final water temperature based upon accepted formulas given in standard handbooks rather than upon a guarantee of capacity based upon a certain number of degrees cooling with a given atmospheric temperature and humidity. The later type guarantees rarely can be verified as coincidence of stated temperature and humidity is accidental and may not occur for a number of years, thus virtually depriving the purchaser of legal relief.

Combined Cooling Tower and Sprays

A combination of the atmospheric type cooling towers with spray nozzles used in the upper sections is now coming into use, the spray nozzles reducing the total height of tower quite materially. The spray nozzles are enclosed in a space surrounded by a wooden partition to reduce spray drift to a minimum.

By this system the advantages of cooling by evaporation of the water from the spray are added to the cooling by flow through the tower and seems to give promise of a wider use in future installations.

In either the straight louvre type tower or the combination of spray and tower it is customary to install coils of three-fourths inch brass pipe near the bottom of the louvre sections for the cool water to flow over. The material to be cooled is passed through these pipes.

To reduce loss of water by windage to a minimum the space between louvres is fitted with wind deflectors. These deflectors vary in design over a wide range but all work on the one principle, that of offering a tortuous outlet for the wind as it is leaving the tower. One type of tower is now being built with the wind deflectors playing a more important part in the design than the louvres.

In the standard type atmospheric cooling tower the wind is directed downward under distributors from which the water is dripping and then upward again to escape. With high wind broadside to the tower the water in circulation is lost very quickly and it is therefore necessary to use the wind deflectors, which are made both manual and automatic in adjustment.

Engineers for gasoline plants and refineries have become so familiar with their various water cooling problems that they have definite knowledge of their requirements and the manufacturer of this type of equipment has also developed his equipment to meet these requirements so little trouble is now experienced in meeting any condition.

In working out details for a water cooling system the plant engineer usually determines the best location possible, taking into consideration pumping conditions, water source, pipe work, exposure, property value, location of other buildings and equipment that might be deteriorated by spray blown from tower, and future expansions.

The next consideration is quantity of water to be circulated, maximum and minimum, and the temperature ranges to be covered.

As atmospheric conditions play a very important part in the operation of atmospheric type cooling towers, a careful study of data available from the United States Weather Bureau will aid materially in determining details of the water cooling system.

With these conditions in mind and also considering the possibilities of reclaiming the tower at some future date and moving it to some other locality some operating companies follow very close to standard specifications, believing that the sacrifice of a small amount of efficiency is justified if the plants can be made interchangeable and can therefore be moved from one location to another as conditions demand.

To retard the growth of moss within the tower it is recommended that a solution of copper sulphate (blue vitrol) be added to the water in circulation. The amount required is not great and a 50-pound sack of copper sulphate will serve an 80-foot tower for some time.

Some louvres are mounted over bolted steel tanks of standard design, while others are carried on their own base provided with space for cooling coils beneath the tower.

Dug Wells Furnish Cool Water

Because of the fact that large amounts of underground water are available in many localities that can be reached by a dug shaft, from the bottom of which is run tunnels that cut across the water course, it has been found that ample supply of cool water can be pumped to a plant at low cost and this water is used only once, when it is either turned to waste, or it may be returned to the water sand from which it came by using bored holes to that level into which the water is piped.

This system has been used in many gasoline plants and refineries in the Mid-Continent area and water having a temperature of about 60° F. has been available summer and winter in quantities in excess of actual requirements.

This article gives only a brief outline of the several systems used in the petroleum industry and specialists are prepared to give detailed information covering their particular systems to those interested, and there is therefore no reason why cool water cannot be had at any location at reasonable costs.

GAS LINE FROM KANSAS TO COLORADO SPRINGS

(Continued from Page 71)

Public Service Co. of Colorado, in turn a subsidiary of the Cities Service Co., and at the city limits of Denver to the Public Service Co. of Colorado, the local distributor in that city. At the time the line was built an effort was made to include Colorado Springs, but no agreement could be reached. The artificial gas manufacturing plant and the local distribution system, as well as the electric system in Colorado Springs is owned by the municipality.

The Public Service Co. of Colorado applied to the electorate of Colorado Springs early in 1928 for a franchise to distribute natural gas in that city. It proposed to buy the local municipality owned plant for $575,000, an amount equal to its outstanding bonds, and to expend $325,000 in improving and extending the local plant. The city council opposed the granting of the franchise on the ground that it wanted a continuous gas service as a public enterprise in connection with its municipal electric system, with a promise that it would untertake to develop a supply of gas for the city and probably get better terms. The franchise was voted down. The city council then undertook to negotiate a contract for the purchase of gas at wholesale from the Colorado Interstate company. This company indicated that it did not feel disposed to deal with the city as a municipal corporation on account of the legal, financial, commercial and political complications attendant upon attempted municipal operation of so technical a business. This resulted in a stalemate and no further negotiations followed for more than a year. However, a public interest developed as a result of Colorado Springs being denied the advantages enjoyed by Denver, Pueblo and other cities in the State and some time ago the leading newspaper editorially urged that steps be taken to remedy the situation. Recently the Colorado Interstate company offered to deliver gas to the city at the city's gates for 40 cents per 1,000 feet, the same price at which it was wholesale to Denver and Pueblo. It was provided that the same domestic rates should apply.

Subsequent to the completion of the line from the Amarillo Field in Texas, a big gas field in southwestern Kansas in Morton and Stevens Counties was discovered, being considerably nearer to Colorado Springs. Mr. Lee, formerly a banker at Thermopolis, Wyo., and for eight years a state senator, was one of the moving spirits in the development of the Morton and Stevens Counties field. The first gas well in Stevens County was brought in in 1927 by W. L. Sidwell and W. M. McNab while drilling for oil near Hugoton. Distribution was built into the town of Hugoton, but no further development came until December, 1928, when Mr. Lee interested some associates, acquired 20,000 acres and drilled in a 10,000,000-foot well 5 miles from the first one. This was followed by the formation of the Argus Gas Co., which secured franchises for Dodge City and 14 other towns in southwestern Kansas. In August, 1929, the Moody-Seagraves interests became affiliated with Mr. Lee and under his direction a system of 200 miles of pipe line was constructed to supply the various cities and towns. The Argus Production Co. was formed by the Moody-Seagraves interests and development proceeded. The proven area is now estimated at 840,000 acres, making it one of the largest gas fields in the country. The Argus Production Co. has contracted to supply 60 per cent of the gas for the Insull and United Light & Power Co. line to eastern Nebraska and Iowa. The Missouri-Kansas Gas Co., which is starting a line to Indianapolis, a few days ago acquired a half interest in 30,000 acres in the field.

Mr. Lee and associates will incorporate a new company to handle the Colorado project. Headquarters will be established at Colorado Springs and surveys for the line from Hugoton, Kans., to that city will start at once. The line will be constructed of 10-inch pipe and will be approximately 200 miles long. Plans provide for construction to begin April 1, 1931, and for gas to be in Colorado Springs by August 31, 1931. The new company will wholesale the gas to the city at a rate beginning at 40 cents per 1,000 feet for the first 10,000,000 feet per month, the rate being stepped down to 30 cents per 1,000 feet for all in excess of 40,000,000 feet. Industrial contracts will be on the basis of 85 per cent to the company and 15 per cent to the city. Gas for the municipal electric plant will be at the rate of 14 cents per 1,000 feet. The rate schedule for domestic consumers is 15 cents per 100 feet for the first 1,000 feet; 10 cents per 100 for the next 2,000 feet; 5 cents for the next 17,000 feet and 4 cents for all in excess of 20,000 feet. The minimum monthly charge will be 90 cents, including 600 feet of gas. City officials estimate that the rates are from 16⅔ to 20 per cent cheaper than the Denver and Pueblo rates.

Associated with Mr. Lee are W. S. Broderick, president of the Western Paving & Construction Co. of Denver; Frank Johnson of Rawlins, Wyo.; H. A. Galligan, president of the Kansas Gas Equipment Co. of Dodge City, Kans. The city of Colorado Springs has onnounced that it will not retail gas appliances in competition with local business men.

DIFFICULTIES OVER TEXAS PRORATION PLAN

(Continued from Page 37)

ed, and several representatives of companies and other operators testified that a general order would prevent these two evils.

Underwood Nazro of the Gulf Production Co. told the commission he could prove there was actual waste in all the coast fields and that there was 15,000,000 bbls. of oil in storage in the coast around Houston, and of this 5,000,000 bbls. was held by the Gulf Production Co.

Beaumont operators offered to enter an agreement to do no more drilling, but claimed if their wells were shut in they would be ruined with salt water.

O. W. Killam, representing the Laredo operators, said production in the wells in that district was not large and that wells must be pumped to capacity to make it profitable to operate.

Williamson County operators in the Chapman Pool said the amount of reduction in production slated in that pool was 20 per cent of the total for the State, which they claimed was unreasonable.

State Divided

Gulf Coast operators, represented by Judge Beeman Strong, asked that if restriction was to be enforced on the Gulf Coast it be done by a local committee that understood local conditions. Underwood Nazro of the Gulf company suggested that the State be divided in half with R. R. Penn at the head of a committee for the north half of the State and P. C. Murphy of the Humphreys company in charge of a committee over the south half of the State. He believed the coast fields could work out their problem in the hands of a local committee.

It was also suggested that local committees be appointed for each field to cooperate with these two heads in formulating the best method of procedure. Mr. Murphy and Mr. Penn both accepted the posts to which they were nominated. Mr. Murphy said that practically all of the Gulf Coast operators wanted some kind of curtailment, but wanted the fields and proration governed locally. He stated that some of the wells in the fields could be curtailed 15 per cent as recommended by the general committee, but that other wells would be damaged, and should not be cut that amount.

Gulf Coast Operators' Statement

The statement filed with the commission by the operators in the Gulf Coast fields around Houston was as follows:

"To the committee of operators called to consider the recommendations of the report to the railroad commission wherein it was suggested that the production of the Gulf Coast fields be curtailed approximately 15 per cent:

"To ascertain if such a curtailment can be made, a close study will have to be made of the facts as they are presented in each field so that no injustice or unfair discrimination will be made against any field or operator therein, and the time afforded before the meeting of August 8 prevents such an analysis and close study of the situation on account of the large number of fields or pools involoved.

"As a general principle, we recommend that the operators in the Gulf Coast fields immediately adopt the principle that only such wells will be drilled as are absolutely necessary to comply with the leasehold obligations.

"We also recommend that if and when the above necessary wells are drilled, resulting in flowing wells, that such wells

be operated on adequate chokers with respect to the gas ration for the purpose of prevention of waste, increased ultimate recovery and efficient and economical methods of production.

"We recognize that in many of the older fields in the Gulf Coast no proration method or curtailment is practicable on account of the age of the wells, the large amount of water to be produced in comparison with the small amount of oil, and that closing in or retarding the production would result in the loss of the wells.

"We believe that if this policy of drilling only wells which are necessary to protect leasehold obligations and producing flowing wells on adequate chokers is adopted and carried out, it will meet the desired result in at least 60 or 90 days' time."

The following list reflects the status of all producing fields in the Texas Gulf Coast area:

Field—	Flowing Wells	Flowing Prod.	Pumping Wells	Pumping Prod.	Total Wells	Total Prod.	Drilling, workover and rigging up wells
Allen Dome	0	0	2	60	2	60	3
Barbers Hill	10	6,047	118	12,528	128	18,575	31
Batson	0	0	285	1,200	285	1,200	0
Big Creek	2	2,300	30	1,858	32	4,158	2
Blue Ridge	0	0	74	1,600	74	1,600	2
Boling	0	0	81	1,164	81	1,164	3
Brenham	0	0	38	138	38	138	2
Damon Mound	0	0	26	708	26	708	1
Esperson	2	550	13	1,783	15	2,333	4
Fannett	1	460	3	442	4	902	1
Goose Creek	1	60	186	4,647	187	4,707	1
Hankamer	7	2,914	1	80	8	2,994	3
High Island	4	850	7	250	11	1,100	3
Hull	13	1,850	237	6,340	250	8,190	4
Humble	20	13,150	234	6,347	254	19,497	17
Lost Lake	0	0	5	375	5	375	1
Markham	0	0	6	394	6	394	0
Moss Bluff	2	0	0	0	2	0	3
Nash Dome	0	0	13	305	13	305	2
North Dayton	4	1,145	2	626	6	1,771	3
Orange	1	60	99	2,057	100	2,117	1
Orchard	2	1,908	3	100	5	2,008	2
Pierce Junction	15	5,633	76	6,446	91	12,079	6
Port Neches	3	1,965	1	263	4	2,228	3
Raccoon Bend	28	7,705	50	4,000	78	11,705	3
Saratoga	0	0	207	1,015	207	1,015	0
Sour Lake	0	0	226	2,196	226	2,196	1
South Liberty	2	377	128	3,395	130	3,772	2
Spindletop	18	6,482	206	10,115	224	16,597	5
Sugarland	36	11,427	2	381	38	11,808	1
West Columbia	5	32	92	5,401	97	5,453	1
Total	176	64,835	2,451	76,214	2,627	141,149	111

"We suggest that the operators in such of the above named fields as the railroad commission may suggest have a meeting promptly and endeavor to curtail their production on a fair and equitable basis to the extent necessary to prevent waste, and submit their findings to the commission for appropriate orders and regulations.

"While we have suggested that curtailment be made as above outlined, we also suggest that no fixed or certain order be made with reference to prorate in the coastal fields on the information thus far furnished by the committee, but only an order, more suggestive than otherwise, that such individual fields as may be designated by the commission shall endeavor after final hearing to produce a named number of barrels per day necessary to prevent waste, and permit the operators in such fields to work out the details of adjustment, and that thereafter the commission call a hearing to ascertain the facts as the basis for the entry of the necessary final orders and regulations applying to that particular field."

Signed by Gulf Coast Committee: P. C. Murphy, chairman, Humphreys Corp.; Dave Harris, Humble Oil & Refining Co.; Marrs McLean, independent operator; John Deering, independent operator; H. F. Montgomery, Mills-Bennett Production Co.; Underwood Nazro, Gulf Refining Co.; Alexander Duessen, consulting geologist and petroleum engineer.

Big Lake Argument

C. L. Black, Austin, attorney for the Big Lake company, told of the six-year contract and determination of the company of the university to adhere to that contract as mutually advantageous. He said the deep wells at Big Lake are different from others in Texas or in the world, the deepest in the world, and will not stand back pressure for purposes of choking. These wells are at 8,500 feet. Judge Black said an investigation of these wells would be welcomed and since they present distinct problems both the Big Lake company and the university would consent to nothing that would endanger or destroy their output. If a study convinced the interested parties that changes could be made safely they would agree and co-operate in every way with the plans proposed.

With the understanding that Mr. Donoghue is to visit the fields and make a general inspection the hearing was adjourned until new reports could be made.

University of Texas was represented by R. L. Batts, chairman of the board of regents. Mr. Batts, in explaining the position of the university, stated the regents were not opposed to any curtailment plan advocated by the oil operators of the State so long as the university's interests were not impaired.

"The Texas University is a permanent institution," Mr. Batts declared, "and it matters little whether the oil is recovered now or 100 years from now."

The formal statement filed with the Railroad Commission by the Big Lake Oil Co. follows:

"The Big Lake Oil Co. respectfully objects to the entry of any order attempting to prorate the producing of oil in the 'Big Lake Oil Field' in Reagan County, Texas, and respectfully shows:

"The Big Lake Oil Co. is a producer of oil in the 'Big Lake Oil Field,' located wholly on land owned by the State of Texas for the benefit of the permanent fund of the University of Texas. It is operating as a lessee under the mineral act of 1917. All of the producing leases are owned by the Big Lake Oil Co. and by Group Number One Oil Corp.

"The Big Lake Oil Co. is selling all of the oil produced by it, as is also Group Number One Oil Corp., to the Reagan County Purchasing Co., Inc., under terms and provisions of a certain general purchase contract dated November 24, 1924. This contract covers the sale and purchase of all of the oil produced on said leased lands during the entire life of the lease.

"No other producer of oil is now tendering or has ever tendered any oil to the Reagan County Purchasing Co., Inc., for sale or delivery. Reagan County Purchasing Co., Inc., is not now discriminating and has never discriminated in the purchase or transportation of oil in favor of said Big Lake Oil Co. and Group Number One Oil Corp. as against any other person, firm or corporation producing oil in Texas. There is no discrimination on the part of the Reagan County Purchasing Co., Inc., as between said two purchasing companies. All of the physical facilities of every character of said Reagan County Purchasing Co., Inc., are now being used, and since the time of its incorporation and the making of purchase contract, dated November 24, 1924, have been exclusively used in the performance of the purchase contract, and these facilities are entirely adequate and at all times have been entirely adequate to handle all of the oil produced in the Big Lake Field.

"The Big Lake Oil Co., therefore, respectfully shows to this honorable commission that it has no jurisdiction to enter any order herein attempting to prorate the market outlet of said field; that no discrimination whatever now exists or has ever existed in the use and enjoyment of said market outlet as against any other producer of oil or as between the only two producers in said field; that there is, therefore, no basis for any action on the part of this commission under the terms and provisions of Chapter 36 of the General Laws of the Forty-First Legislature, fifth called session.

Jurisdiction Questioned

"The Big Lake Oil Co. further shows there has been no excessive or unnecessary drilling of oil wells in the field; that no so-called drilling campaign has ever been conducted in the field; that there is no actual waste of oil in Big Lake oil field and that no reason exists for the entry of any proration order on the theory of preventing actual waste.

"The Big Lake Oil Co. further shows that there are two producing stratas of oil in the field, one a shallow strata found at above 2,650 feet, and the other a deeper strata found at about 8,600 feet; that practically all of the wells producing oil from the shallow strata or horizon are old wells, most of them producing less than 100 bbls. per day, and many only a few barrels per day; that all of them are operated as pumpers; that water has begun to encroach in this shallow strata and that any effort to reduce or restrict production from these wells would greatly increase the invasion of water and would result in the destruction of a large number of these wells; that, for that reason, any effort to reduce the production of these wells would result in actual waste of oil.

"Big Lake Oil Co. further shows in respect to the wells producing oil from the deeper strata that any attempted proration with resulting restrictions of production from these wells would greatly injure them and very probably would destroy them; that there is no known way of reducing the production from these deeper strata wells without injuring them.

"Respectfully submitted,

"BIG LAKE OIL CO.,

"By J. C. Adams, J. J. Hines, Charles L. Black, Its Attorneys."

Constitutionality Challenged

The statement filed with the Railroad Commission by Harrison Oil Co. and J. S. Abercrombie follows:

"That the Railroad Commission of Texas is without constitutional authority to take jurisdiction of and entertain any plan or scheme for statewide proration, such as has been proposed by the committee which filed its report in this cause under the date of July 30, 1930, of which the Honorable Robert Penn is chairman, and that any order or regulation promulgating and carrying into effect any such plan would deprive protestants of their property without due process of law, and would deprive them of the equal protection of the law in violation of the Fourteenth Amendment to the Constitution of the United States and in violation of the Sections 17 and 18 of Article 1 of the Constitution of the State of Texas.

"That any order or regulation designed to carry out such a scheme or plan of statewide proration is without any ground of statutory authority on the part of the Legislature of the State of Texas conferring power to the Railroad Commission, but is in express violation of the statutes of the State of Texas conferring authority on the railroad commission of the State of Texas to act in such instances, for the reason that said statutes expressly provide that the railroad commission shall in all such instances act for the purpose of preventing actual waste and are specifically forbidden to act in the instances involving economic waste.

"That any order or regulation that might be promulgated by the railroad commission for the purpose of carrying into force and effect any such plan of state-wide proration could have for its purpose the accomplishment of only one end, to-wit, the stabilization of the market price of crude petroleum by restricting and curtailing the production thereof to the so-called market outlet or demand. That such purpose is wholly and entirely designed to deal with and remedy an economic situation concerning which the railroad commission of Texas is by statute forbidden to act.

"That the so-called common purchaser or pipe line act, enacted by the Forty-fifth Legislature, First Called Session, Chapter 36, regulating pipe line companies and common purchasers of oil, in no manner directly or indirectly authorizes the railroad commission to promulgate any order, rule or regulation restricting the amount of oil that any producer may produce from any lease, but deals with and is designed solely to prevent discrimination on the part of common purchasers, and is not applicable to and in no manner restricts the action and property rights of the producer with respect to the amount of oil which he may produce from his leasehold property.

Pipe Line Law

"That said pipe line or common purchaser act above referred to is self-enacting and does not require the entry of any order, rule or regulation on the part of the railroad commission in order to make said statute effective, and that the only type or nature of order or regulation which should be promulgated by the railroad commission is an order to regulate providing the method of determining:

"(a). The total actual daily production of each of all of the fields of the State of Texas which is to be tendered for sale to common purchasers of crude petroleum.

"(b). The actual daily production of each operator in each field which is tendered to common purchaser for purchase.

"(c). The total or aggregate amount of all oil in the State of Texas which the total of all common purchasers operating in the State of Texas desire to purchase daily.

"Such rule or regulation shall provide for an orderly ascertainment of such facts and data so as to disclose the grade and quality of oil with respect to each of a, b and c, so that the commission could readily determine whether or not there was discrimination, either as between leases in one field, or as between fields, and should be readily available to all producers of oil in order that each producer might determine whether or not he was being discriminated against in the sale and purchase of his oil. Thereafter said act should be enforced by the assessment of penalties against any common purchaser shown to be guilty of discrimination upon complaint of any producer.

"That entry and promulgation of rules and regulations designed to carry into effect any plan of state-wide proration and curtailment of production for the purpose of stabilizing and fixing price, or for the purpose of co-ordinating supply with a theoretical demand, would be especially discriminatory with respect to the Gulf Coast fields in the State of Texas, and that no such order should be entered affecting the said Gulf Coast fields, for the reason.

"(a). That said fields, by virtue of the quality of oil produced therein, and by virtue of their geographical position with respect to accessibility to the world market, are and will always be in a position to enjoy a much greater market for crude petroleum produced therefrom than will be enjoyed by fields situated on the interior of the State and not accessible to the world market.

"(b). Because a great deal of the oil produced from said Gulf Coast fields is marketed in the world market direct by the producers thereof and is not sold through common purchasers.

"(c). That the Gulf Coast fields are all fields of multiple producing horizons disconnected and largely free from influence on one another, and so are not susceptible from their physical nature of being dealt with as are the fields located in the interior of the State.

General Order Opposed

"(d). That to ascertain instances wherein properties may be produced under conditions causing actual waste and to ascertain methods of preventing the same would require lengthy and detailed investigations with respect to each separate individual Gulf Coast field and with respect to each separate producing property

therein, and cannot be dealt with under any general order affecting the entire State of Texas.

"(e). That any general order of the nature calculated to curtail and prorate production throughout the State of Texas would be destructive of the most valuable asset possessed by the industry, to-wit, the individual capacity and effort of each individual operator to devise means and methods of more successfully operating his property and producing oil therefrom successfully and economically.

"Without waiving any of their legal rights, either in this hearing or in any subsequent litigation seeking relief to set forth and rely upon other grounds for objection but expressly reserving such right, these protestants respectfully show to your honorable body that no type or nature of general order should be entered or promulgated seeking to prorate or curtail production throughout the State of Texas, and especially with respect to the Gulf Coast fields of the State of Texas, but that this honorable body should only take action and enter orders with respect to the Gulf Coast fields or other fields of the State of Texas in those instances wherein it is brought to their attention that properties are being operated under conditions involving actual waste which may be prevented by appropriate orders."

The North Texas Geological Society, through J. P. Bowen, president, sent the following telegram to the Railroad Commission:

"We heartily endorse your efforts towards statewide curtailment of oil production and think it is the only way that true conservation of our State's most valuable natural resource can be effected equitably."

STANDARD OF NEW JERSEY WILL SELL AUTO TIRES

(Continued from Page 138)

hazards that may render the tire unfit for further service. The company has established a scale of prices for its tires which compares favorably with quotations of large mail order companies. On the more popular sizes, prices will be as follows:

30x3½ regular	$4.95
30x3½ oversize	5.50
29x4.40	6.80
30x4.50	7.85
29x5.50	12.05
30x5.50	12.25
31x6	13.20
32x6, 6 ply	16.60

While thus far the plans of major companies contemplate only the addition of tires and tubes to the stocks of their filling stations, it is believed that eventually a line of fast moving automobile supplies will be found in the stations of many of the large oil companies, as well as cigarette and candy vending machines. A number of small independent companies have successfully embarked upon the marketing of allied products at their stations during the past few years, and the large oil companies have followed these developments closely.

Diversification of the stocks carried by retail filling stations, it is believed, will in large measure solve the problems created by the multiplicity of stations in congested marketing areas. For some time past it has been felt by leaders in the industry that the returns from these stations did not fully justify the extensive investments which they represent, and ways and means have been sought of increasing the net revenues of these stations.

LITTLE CHANGE IN OKLAHOMA MARKET

(Continued from Page 36)

of the year. Some buyers are considering purchases of distillate for storage but these inquiries have been few and have not developed into sales. Gas oil continues to be quoted at 2¼ cents and yields a favorable revenue as a cracking stock at that price but refiners have balanced their cracking operations with their production of this commodity and the sales of gas oil are now largely restricted to specialty buyers. The demand for gas oil on the part of the artificial gas manufacturer has decreased due to the seasonal slump in his output and gas oil prices are expected to remain near their present position for some time into the future.

Fuel Oil

The low gravity fuel oil market is inactive, with prices remaining about the same. There are reports of 16 gravity material moving out of Chicago at times carrying a price equivalent to 37½ cents a barrel, Group 3, but 40 cents remains as the minimum out of Oklahoma.

Lubricants

The reduction in the prices on neutrals by the Mid-Continent Petroleum Corp. on August 5, amounting to approximately 1 cent a gallon, indicates the weak position of this market. Competition has been keen between the Pennsylvania refiners and the mid-western refiners during the past few months and with Pennsylvania crude down near the price of Mid-Continent crude, unusually low quotations have come from there. This competition is assuming the appearance of a vicious circle, for it is quite apparent that there is an overproduction of lubricants in both areas at the present time. Bright stock prices took another substantial drop when 25 cents was made the general quotation August 5. This represents a drop of 12 cents in less than three months, with no change in the Mid-Continent crude price. Further reductions are entirely possible since Pennsylvania refiners are selling 150-160 D colored bright stock at 23 to 25 cents and glad to get the business.

Wax inquiries were numerous but only a normal volume of this commodity moved during the week.

HOT WEATHER AND EXPANSION OF GAS CAUSE TROUBLE TO EQUIPMENT

Many troubles are attributed to hot weather and high temperatures seem to have their effect upon oil well equipment as much as upon the farmer's crops.

When Phillips Petroleum Co.'s No. 1 Traders was completed in the Oklahoma City Pool in July it was connected with two high pressure oil and gas separators through a special flow head placed directly on the casing to settle out sand that accompanies the oil and gas.

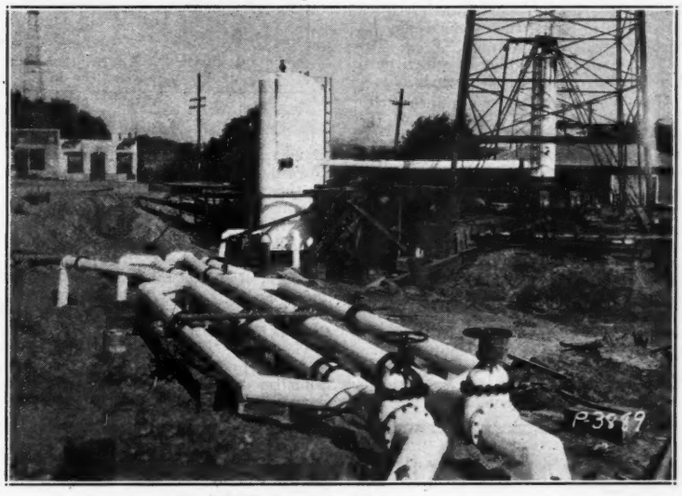
From the oil and gas separators the gas was discharged through four 10-inch lines in which were inserted connections for gas meters and beyond these four 10-inch lines the gas was carried in two 12-inch lines to a 20-inch vertical vent. This upright vent pipe was set about 300 feet from the well, and discharged the gas into the atmosphere.

It is reported that the government thermometer at the Weather Bureau in Oklahoma City registered 101.6° F. on July 26 when the well was first produced and the expansion of the gas in the flow head, oil and gas separators and vent lines was so rapid that all of these metal parts were quickly coated with frost.

It is assumed that the metal in the traps and pipe was close to atmospheric temperature, or about 100° F. when the gas was turned through the discharge system and the rapid cooling that took place as this gas expanded and took heat from the metal caused contraction in a long 8-inch vent line that led from the traps to the 10-inch lines and caused two of the four to part.

It was reported that this line blew up but that is not correct for the sudden contraction of the steel that had been expanded due to the heat of the air surrounding it caused tremendous internal strains in the pipe and it pulled apart.

This is a rather unusual occurrence but illustrates what does happen at times to oil field equipment even when every precaution in design is exercised to fit the apparatus for its particular duty. No additional damage was done and the break was quickly repaired and the production of this well, both oil and gas satisfactorily handled.



Hook-up at Phillips Petroleum Co.'s No. 1 Traders well in the north Oklahoma City Pool.

CARBON GAS OPERATIONS

CHATHAM, Ontario, Aug. 9.—In the Carbon, Alberta, district, Carbon Exploration Co. is continuing development work with a view of obtaining a natural gas supply for the town of Carbon. No. 1 well, in LSD 7, Section 18-29-22w4, has encountered gas showings at several horizons, with what looks like a small commercial production, probably 400,000 feet a day, at 650 feet depth. Analysis of the gas shows: Ethane, 0.1 per cent; methane, 95.8 per cent; carbon dioxide, 0.4 per cent; oxygen, 0.7 per cent; nitrogen by difference, 3 per cent. No. 1 well will likely be finished at the present depth, and No. 2 started with a larger hole to test the formations to around 1,200 feet or more.

SOUTHERN UNION GETS LEASE

DENVER, Colo., Aug. 12.—The Southern Union Gas Co. of Dallas, Tex., was the highest bidder for a gas lease on a tract of 4,720 acres on the Barker Dome of the Ute gas field in the Consolidated Ute Indian Reservation in San Juan County, New Mexico, offered at auction at Santa Fe by the Commissioner of Indian Affairs. Its bid was $47,300. The bidding was spirited between C. J. Roberts of Santa Fe, representing the Southern Union Co. and a representative of the Empire Gas & Fuel Co.

OREGON BASIN LEASE SUBJECT TO RESTRICTION

DENVER, Colo., Aug. 12.—The public offering of leases on 1,320 acres in the Oregon Basin Field in Park County, Wyoming, by the register of the Land Office at Cheyenne on August 8 resulted in bids aggregating $197,600 for 720 acres. There were no bids on the remaining 600 acres. John McFayden, of Casper, representing the Custer Petroleum Co., controlled by Findlay, Ohio, people identified with the Ohio Oil Co., was the highest bidder on Unit No. 2 comprising 520 acres in the Wiley Field. His bid was $114,400, or $220 per acre for the 520 acres. A. Baker, representing the Ohio Oil Co., was the highest bidder for Unit No. 3, embracing 200 acres in the Wiley Field. His bid was $83,200, or $416 per acre. A. R. Wilson, vice president and general manager of the Texas Production Co., and Paul B. Whitney, representing George F. Getty, Inc., of Los Angeles, were other bidders. The acreage lies on or near the top of the Oregon Basin structure.

The offering was subject to a provision that only such wells on the leased land as are necessary to offset drainage are to be drilled unless and until authorized by the Secretary of the Interior and that only one well is to be drilled on a 40-acre tract. Unless drainage is fully offset within four months, the lessee must pay the Government a compensating royalty.

Unit No. 2 comprises the NE, Section 5-51-100; E half SE, Section 31, SW, NW SE and S half SE, Section 32-52-100. Unit No. 3 comprises the N half SW, Section 5 and E half NE, and NE SE, Section 6-51-100.

IMPORT TAX POSSIBLE

CHATHAM, Ontario, Aug. 9.—The change of federal government resulting from the Dominion elections on July 28, when the King government was defeated by the Conservatives led by Hon. R. B. Bennett, may involve restrictions on the import of crude petroleum to Canada. While Mr. Bennett did not deal specifically with the matter in his preelection platform, in an address at Sarnia he deprecated extensive imports from the United States and urged the development of Canadian crude oil supplies. Mr. Bennett was formerly interested in oil development in Alberta through the Royalite Oil Co., of which he was president, but is understood to have relinquished all business interests of this sort following his election to the Conservative leadership.

GULF COAST MARKET

Gulf Coast refinery markets indicated no change the past week. Fuel oils continued firm in price although easily available at quotations ranging from 75 to 80 cents for cargo movement and 85 to 90 cents for barge lots of 10,000 to 20,000 bbls. to $1.05 for bunker fuel at loading terminals. Gas oil at quotations of 3¾ to 4 cents has indicated no variations for many weeks, this product usually being limited to established outlets.

Pale and red oils still have failed to indicate any definite trends with all grades being held on a steady price structure with a fair volume of sales but not sufficient to result in any strengthening above the present situation. Gasolines, which for some time have been the uncertain quantity, continued to be held at a minimum of 7¼ cents for domestic sales.

PRODUCTION DIVISION FORMED

WICHITA FALLS, Tex., Aug. 11.—A new chapter of the Division of Production has been formally organized in the Wichita Falls area, with headquarters in Wichita Falls. The following officers were elected: Chairman, Frank M. Stauffer, Panhandle Refining Co.; vice chairman, Lewis D. Ryan, Fresno Oil Co.; and secretary, C. B. Clement, The Texas Company.

CONSIDER INCLUDING TIDE WATER IN MERGER

NEW YORK, Aug. 13.—Inclusion of Tide Water-Associated in the Sinclair-Prairie Consolidation, reported as having been arranged, will put Sinclair into the Far Eastern market as a partner of the powerful Mitsubishi interests of Japan.

Tide Water-Associated, in conjunction with Mitsubishi Oil Co., Ltd., is erecting a refinery near Tokyo, Japan. The refinery will be a complete modern refining unit, and will have a capacity of 4,000 bbls. of crude per day and a cracking capacity of 1,500 bbls. daily.

According to reports from abroad, the Tokyo refinery will be equipped to produce gasoline, distillates, lubricating oil, fuel oil, and other petroleum products, which will be marketed throughout Japan, in Korea, Formosa, and other parts of the Orient.

Crude oil requirements of the Tokyo refinery will be furnished by Associated Oil Co. of California.

Mitsubishi Oil Co., Ltd., is controlled jointly by Tide Water-Associated and Mitsubishi Goshi Kaisha, Ltd., one of the largest industrial concerns in Japan, with international affiliations and operations.

Late Fields

(Continued from Page 48)

being erected on the lease. The total depth of the well is 3,454 feet in sand.

Prairie Oil & Gas Co. and others' No. 1 in the NW cor. SE SE, Section 1-5-4, a wildcat south of the Wanette Pool, had water in the Wilcox sand at 3,100-03 feet and may be abandoned.

Continental Oil Co.'s No. 1 Misener, SE cor. SW NW, Section 10-20-4w, Garfield County, had a showing of oil in Simpson sand at 5,720-65 feet, and was drilling deeper at 5,770 feet.

Alco Royalty Co.'s No. 1 Wolfe, SE cor. SW SE, Section 34-26-2w, Kay County wildcat, had 5,000,000 feet of gas at 4,420 feet in chat and was drilling.

T. Atkins and others' No. 1 Shepard, SE cor. NE, Section 4-8-8, Seminole County wildcat, had water in the second Wilcox sand at 4,355-61 feet. The test may be abandoned.

Minnehoma Oil & Gas Co.'s No. 1 Brown, SW cor. NE NE, Section 17-7-8, has been shut in for 21,000,000 feet of gas with a rock pressure of 995 pounds.

Production from the Oklahoma City Pool, August 12, was 42,731 bbls. from 28 wells, with a total of 411 wells completed in the field. Five new wells were completed in the field the same day. The Indian Territory Illuminating Oil Co.'s No. 6 S. Peterson, NW cor. SE SW, Section 25-11-3w, made 10 356 bbls. the first 18 hours and 50 minutes from sand at a total depth of 6,620 feet. Same company's No. 5 State Land, NW cor. NE NW, Section 36-11-3w, made 3,524 bbls. the first 16 hours and 10 minutes. Sinclair Oil & Gas Co.'s No. 10 Vencl, NE cor. SW SE, Section 31-11-2w, in the south end of the field, made 3,401 bbls. the first four hours. Coline Oil Co.'s No. 7 Clauer, NW cor. SE SE, Section 25-11-3w, made 968 bbls. the first 19 hours from Simpson sand at a total depth of 6,540 feet. Wirt Franklin Petroleum Corp.'s No. 7 Theimer, SW cor. SE, Section 2-11-3w, made 5,077 bbls. the first 16 hours and 80,000,000 feet of gas. The well is producing from Simpson sand at 6,536-70 feet.

Sinclair Oil & Gas Co.'s No. 1 Stewart, C SW SW, Section 33-27-16w, Woods County wildcat, is preparing to drill out the cement plug. The 4¾-inch casing was landed at 7,027 feet. The Wilcox sand was found at 7,130-76 feet. The company has taken cores from the Simpson sand and Wilcox sand which had showings of oil and gas. A test will be made of the well in both the Simpson and Wilcox sands.

SOUTHWEST TEXAS

SAN ANTONIO, Tex., Aug. 12.—Full 24-hour gauge of Darst Creek shows production of 156,700 bbls. which will be the basis of new proration starting August 16. This is only about 25 per cent below the daily potential as based on a one-hour gauge the last of June and shows the field holding up remarkably well as it was producing around 75,000 bbls. per day for more than a month. There is very little water showing. One Texas well on Knoblock shows 5 per cent which seems to be the largest. New allowable daily runs will be 42,175 bbls.

In Pettus Field Humble's No. 5 McKinney at 3,903 feet is a 500-bbl. well. Grayburg's No. 1 Copeland at 3,680 feet passed through two salt water sands and has no oil and is past oil sand depth of company's discovery, No. A-1 Kimball. Adams & Lyles' No. 1 Otto Nitsch, southwest of Darst Creek in Guadalupe County, got sulphur water in Edwards lime, total depth 2,711 feet and is abandoned.

KANSAS

Shell Petroleum Corp. and Tatlock and others' No. 1 Ploog, C SW SE Section 33-18-9w, a wildcat in Rice County, had Silicious lime at 3,249-52 feet, was deepened 1 foot and made 733 bbls. the first 24 hours, and later 195 bbls. in six hours, of 49 gravity oil. Interested with the Shell Petroleum Corp and Tatlock are the Carter Oil Co., Empire Oil & Refining Co. and J. A. Hull Co. The new well is to be shut in until crude oil marketing conditions improve. At battery of six 500-bbl. tanks is being erected.

A 1-acre church tract in the Haverhill Pool, east of Augusta, Butler County, is to be tested for oil and gas. Location has been made by the Four Drillers Supply Co. for No. 1, NE cor. Section 22-27-5, offsetting the Connel & Austin's 5-bbl. well which had about 22 feet of Wilcox sand.

Darby Petroleum Co., Simmons & Canary's No. 1 Bishop, C NW SW Section 15-18-1w, McPherson County wildcat, had a hole full of water in the Wilcox sand at 3,341-46 feet. The Viola lime was found at 3,239 feet and the Simpson lime at 3,306 feet. It may be drilled deeper to the Silicious lime.

Another wildcat location was announced 3 miles northwest of the Schurr Pool in Rice County by J. F. McCole and others' No. 1 Isren, SE cor. SW NE Section 12-20-11w. It is expected to be spudded in a few days.

Producers & Refiners Corp. announced a new location southeast of production in the Eastborough Pool in Sedgwick County. The location is in the NW cor. SE Section 30-27-2 and is a half mile south of the Vickers Petroleum Co.'s No. 1 Keys, the only Simpson sand well in the pool.

Aladdin Petroleum Corp.'s No. 1 Bryant, NW cor. NE Section 28-20-10w, a half mile south of production in the Schurr Pool, in Rice County, found a showing of oil in the Kansas City lime at 3,000-19 feet. It was drilling at 3,120 feet, August 9, and was expected to reach the pay horizon in a few days.

PRESS LOWRANCE ILL

MEMPHIS, Tenn., Aug. 11.—Press Lowrance, president of the Southland Royalty Co., of Ponca City, Okla., who is critically ill in a Memphis hospital, was reported by attndants to be in a "poor" condition. He is suffering from pneumonia contracted following an operation.

DEFIANCE OIL CO. SOLD

CHICAGO, Aug. 9.—The Cities Service Co. has bought and will operate the Defiance Oil Co. of Defiance, Ohio. The Defiance Oil Co. did a general jobbing business and operated bulk and service stations.

D. S. WAKENIGHT, PIONEER WRITER OF OIL NEWS, IS TAKEN BY DEATH

PITTSBURGH, Pa., Aug. 11.—Daniel Scott Wakenight, aged 79 years, dean of the country's oil-field reporters, died in his home here Wednesday of last week. A brief illness, to which excessively hot weather contributed, preceded his death. Mr. Wakenight was in active service as an oil writer until last month, when he retired as staff correspondent for The Oil and Gas Journal, Tulsa, and The Oil City Derrick, Oil City, Pa. He had completed 45 years of continuous reporting of oil developments in the eastern fields.

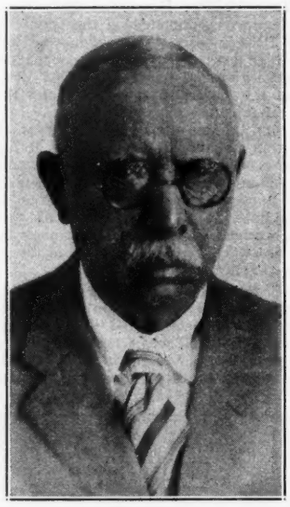
Mr. Wakenight was born in Donnelsville, near Springfield, Ohio, in 1851. He attended school in winter and worked on farms during the summer. Later he was a teacher of district schools, after which he attended a commercial school in Buffalo, N. Y.

In 1876 Mr. Wakenight migrated to the oil regions of Pennsylvania, taking a position on the Parker City Daily. A year later he was engaged by The Oil City Derrick, since which time, with the exception of a period of five years, he had been employed by the Boyle publications. In 1890 he was transferred to Pittsburgh to report the oil developments of Southwest Pennsylvania, West Virginia and Southeast Ohio, in which position he had remained continuously.

Mr. Wakenight's acquaintance with pioneer oil men and with those of the later generation was unusually wide. During his long service with the Boyle publications he possessed remarkable health, which enabled him to supply oil reports regularly and efficiently. He was a member of the Masonic order in Pittsburgh and of the Episcopal Church. He was the oldest member of the Pittsburgh Press Club.

Mr. Wakenight leaves one daughter, Mrs. Ethel Wakenight Hays; two grandchildren, Charles and Jean Hays; one brother, William O. Wakenight, and one sister, Miss Mary E. Wakenight, all of Pittsburgh.

Funeral services, conducted at Mr. Wakenight's late home in Winterburn Avenue Friday afternoon by Rev. L. H. Harris of the Church of the Redeemer, were attended by his friends and early



D. S. Wakenight

oil men. The honorary pallbearers were Edward R. Boyle of Oil City, president of the Derrick Publishing Co.; John O'Donnell of Oil City, general manager and treasurer of the Derrick Publishing Co.; T. M. Magee of Keister and Bradford, Pa.; Theodore C. Towl, James H. Redpath, Roy L. Cronise, Brady Rhodes and John J. Kenney, all of Pittsburgh. Leon H. Walter of Oil City represented the Oil City Derrick.

The active pallbearers were members of Joppa Lodge, F. and A. M., and the commitment rites in old Smithfield Cemetery were in charge of the Masons.

PIPE PROTECTION BOOKLET

A new booklet, "The Protection of Oil and Gas Lines," has been prepared by the Wailes Dove-Hermiston Corp., New York, which has specialized for nearly half a century in the development, manufacture and application of anticorrosive and waterproofing compositions. One chapter is devoted to illustrations showing that engineers of large oil and gas trunk line systems, have chosen protective coatings which have a record of satisfactory performance over long periods of time and under many kinds of service conditions. The causes of corrosion, the need for protection and the 14 requirements for an effective pipe coating are described in the new booklet. Practical recommendations are given concerning the best type of protection for installations of various kinds.

GREAT FALLS EXTENSION

CASPER, Wyo., Aug. 9.—Hope Engineering Co. has commenced construction of its 55-mile gas line, connecting with the northern end of the Great Falls line in the Kevin-Sunburst Field and extending northward to the Canadian line. The line is 10-inch and will serve as a feeder to the Great Falls line. The new line connects with the Great Falls line at Telstad and runs northwest to Whitlash, 37 miles. At Whitlash, the line will be reduced to 8-inch. It will run across the border to the Rogers-Imperial well, on the line, and serve the nearby well being completed by the Range Oil & Gas Co. on the same structure.

Five miles of 6-inch gathering lines will also be built to connect with gas wells completed during the past two years by the Western Natural Gas Co. of Butte and Anaconda.

PIPE LINE TAX CONSIDERED

WASHINGTON, D. C., Aug. 11.—The next legislature may provide that pipe lines in the State of Iowa must be taxed in the same manner as telephone and telegraph companies. In a statement made public recently by Chairman Louis H. Cook of the State Board of Assessment, it is learned that the Board of Assessment is planning to recommend such legislation.

SUPPLY THEATER CONTRACTS

NEW YORK, Aug. 12.—Warner-Quinlan Co. has closed contracts aggregating 2,700,000 gallons of furnace oil with two theater chains in New York City.

Warner Brothers theaters in the New York area will use 1,500,000 gallons of this oil for heating purposes, while the Radio-Keith-Orpheum chain will use 1,200,000 gallons of this oil.

NORTH DAKOTA GASOLINE TESTS

Bulletin No. 27 of the North Dakota food commissioner and chemist summarizes the results of tests on gasoline made by the inspector's office as follows:

"The gasoline sold in North Dakota during 1929 was considerably more volatile than that sold during the previous year or, in fact, than was sold during at least the last five years. It was not only more volatile, but was better balanced and of higher quality in every respect." These findings are consistent with the United States Bureau of Mines report for gasolines sold all over the United States.

NEW SHALE PLANT IN WALES

NEW YORK, Aug. 12.—A group of important Australian mining companies has purchased a distillation and refining plant at Newnes, New South Wales, and an option over some 11,000 acres of oil-shale land in the neighborhood.

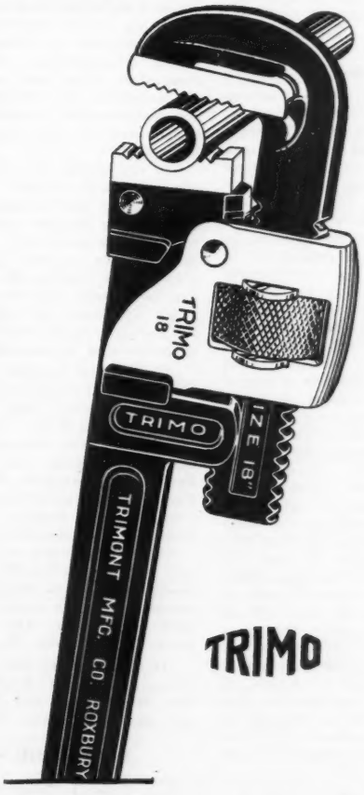
A separate company, to be known as Oil Shale Investigations Proprietary, is to be registered in which each of the companies comprising the group will have an equal interest, and a thorough investigation is to be made immediately of the commercial possibilities of the production of lubricating and fuel oils from the shale.

The Answer: more value for you

THE MAKERS OF TRIMO wrenches employ a staff of mechanical experts to test and inspect every wrench that bears the TRIMO name. Theirs is a problem of multiplication. By rigorously guarding against imperfections and inaccuracies they multiply the strength, service and safety of this finely made tool.

When you multiply the length of service, naturally you divide the real cost of the wrench. Any way you look at it, it is simple arithmetic that the all-steel TRIMO pipe wrench gives you the biggest dollar's worth.

Oil men who really pay attention to what their tools deliver in the way of performance regard TRIMO as the logical choice.



TRIMO
Pipe Wrench

Handle Drop Forged --- not Cast
All Steel for Strength

Made by Trimont Mfg. Co., Inc., Roxbury (Boston), Mass.

Of Interest to Sales Departments

Trackage Stations Gain In Importance As Market Factors

CHICAGO, Aug. 9.—The success which has attended the operation of the so-called "Trackage Stations," and all stations operating on their plan, has brought a new factor in marketing which is rapidly becoming of prime importance. Within a couple of years these stations and their smaller imitators, the "Bulk Service Station," have forged to the front until they have become of sufficient importance to command attention.

The plan of operation of the trackage stations is to secure a site where their supplies of gasoline and other oils can be delivered to the station in tank car lots. Contrary to the common idea, these stations do not offer to their trade an inferior grade of gasoline. On the contrary the successful ones are shrewd buyers and very particular as to the gasoline supplied to them. It must be a good motor fuel, assuring their customers satisfaction and bringing them back for further fills.

Their prices are usually 2 cents lower than the normal station price but in some highly competitive areas the price is 3 cents below the station price. The stations are well designed, equipped and carefully managed. The attendants are courteous and competent. At times they have to work fast so that the motorists from some suburb may miss the leisurely attention to which he is accustomed at his home station.

Large Sales

Sales are large at the sizable trackage stations, some running a car a day, others as high as 40 cars a month. There are stations in Chicago and nearby cities. Their trade is worth having for they are prompt pay for one thing. Every sale is for cash.

Travelers who have driven in the East state that these stations are growing in number. They have been established in the West for some time and their owners seem to be making money. As an example a large trackage type station was opened on Broadway near Bryn Mawr Avenue, Chicago, late in June. The management is so well satisfied with its venture that it has arranged for a site for a second station on Milwaukee Avenue, and proposes to establish at least four such stations in the city. It is estimated that this new station is selling about 6,000 gallons of gasoline daily. An adjoining service station has been converted for the most part into a used car sales yard.

In talking with the managers of some of these stations it is claimed that they find that a 5-cent margin is ample for them to do a successful business. They believe that they will always be able to secure this margin as the total volume of their business is so great that they secure the co-operation of some of the largest refiners. They have no fear that a tank wagon decline and a refinery advance will peril their business for they believe that they can buy as cheaply as refiners can refine and distribute at less costs than the integrated companies with their heavy overhead.

INDIAN OFFERS NEW GASOLINE

CHICAGO, Aug. 9.—The Indian Refining Co. put on sale at its service stations on August 1 a new gasoline under the name of Green-Lite gasoline. It is claimed for this gasoline that it is more highly volatile and powerful than the usual grade of gasoline offered at service stations at the regular price. It will be sold at the regular station price while the Indian Red will continue to be their premium antiknock fuel.

INTRODUCE NEW STANAVO MOTOR FUEL AND OILS

NEW YORK, Aug. 9.—The Stanavo Specification Board, Inc., has chosen the National Air Races at Chicago as the occasion for the formal announcement of Stanavo Aviation Gasoline. This latest Stanavo product is rapidly being made available at airports throughout the country and shortly will have the same world-wide distribution as Stanavo Aviation Engine Oil, which was introduced at the Cleveland races last year. The new gasoline, like other Stanavo products, is made under the supervision of the Stanavo board, the members of which are the Standard Oil Co. of California, Standard Oil Co. (Indiana) and Standard Oil Co. of New Jersey.

The announcement of the Stanavo board states:

"Aviation has long felt the need of a superior gasoline designed specifically for aviation engines. Stanavo Aviation Gasoline meets this need. Its distillation properties assure ease of starting, even distribution in the cylinders, and low consumption. At the same time, this new gasoline is entirely free from any tendency to cause vapor lock, is non-detonating in any present-day commercial aircraft engine, and not only meets the most rigid tests for purity at the time of manufacture, but also retains its characteristics even after long periods of storage in tropical climates. It is the claim of the board that never before without using knock suppressors has a gasoline been made available with such superior nondetonating properties at the same time maintaining all the desirable characteristics of straightrun gasolines. Its nondetonating properties are just as pronounced at high temperatures as at low.

"In developing Stanavo Aviation Gasoline, the board utilized the manufacturing, research and aeronautical experience of the three member companies, each of which has been actively engaged in practical aviation for years, operating its own planes, now totaling 23. The board also had the benefit of the technical and operating experience and the advice of leading aircraft engine builders, air transport operators and governmental agencies.

"The manner in which the industry has received Stanavo Aviation Engine Oil indicates a similar reception for its new companion product. Already Stanavo gasoline has been adopted by Boeing Airplane Co., Boeing Air Transport, Inc., Pacific Air Transport, Air Ferries, Ltd., Pan-American-Grace Airways, Inc., New York, Rio and Buenos Aires Lines, and leading engine manufacturers.

"After more than a year of research and testing, the board is now ready to announce Stanavo Rocker Arm Grease, designed to meet another long standing need of aviation. The new product is made in two grades, No. 1 and No. 2.

"In addition to the four grades of Stanavo Aviation Engine Oil, namely, Nos. 80, 100, 120 and 140, the board is now making available No. 60.

MORE CODE SIGNERS

The Federal Trade Commission continues to receive signed acceptances of the Code of Marketing Practices, according to reports of the American Petroleum Institute. A report last week has the additional names of approximately 350 companies and individuals engaged in the marketing of refined petroleum products.

The latest signatures include a large number of western jobbers and dealers. Practically all of the major oil companies signed the code when it was first introduced. Total signatures are now in excess of 15,000.

May Gasoline Tax Reports Show Loss In Several States

The decline in the gasoline tank car market in May is partially explained by figures on the gasoline tax payments for that month which became available during the past week. The report which was compiled by the American Petroleum Institute shows that the gasoline tax payments in 43 states indicated a gasoline consumption totaling 946,524,000 gallons. This is only 4.5 per cent greater than the consumption of the same states in May of last year. Based on daily average figures, gasoline consumption in May of this year was actually 2 per cent less than in April, although May usually shows a substantial seasonal gain due to more favorable weather conditions.

Of the 43 states included in the report, the gallonage in May was less than in April in 29 states. These states were: Oklahoma, Arizona, Colorado, Florida, Georgia, Iowa, Kansas, Louisiana, Maryland, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oregon, Rhode Island, South Dakota, Utah, Washington and Wyoming. It will be noted that several of these states are located in the Middle West where the slow May demand was reflected in a weak Mid-Continent market.

In addition, there were several states in which the May, 1930, demand was less than that in May, 1929. These states were: Alabama, Florida, Georgia, Kansas, Maryland, Minnesota, Mississippi, Nebraska, North Carolina, North Dakota, South Dakota, Utah and Wyoming.

Despite the low May figure, the gasoline demand for the first five months showed a normal gain of 10.5 per cent over the same month last year. In only three states—Nebraska, North Carolina and North Dakota—was the gallonage less the first five months of 1930 than the first five months of 1929.

The following table gives the quantity sold by states. In some cases they are gross figures before deductions allowed for small quantities of gasoline reshipped or sold for other than taxable use, the

(Continued on Page 157)

TRAVEL BUREAU HAS MANY INQUIRIES FROM TOURISTS

The increased travel of the tourist trade is reflected in the reports of the Continental Oil Co. showing that activities at its Travel Bureau have more than doubled during the past 30 days. The company this year enlarged this service in all parts of the country in which it operates.

Between 400 and 700 inquiries are being received daily at the Travel Bureau of the Denver office. Twenty-two people are now at work making maps, issuing passports, indexing, cutting stencils and providing other items of personal service.

More than 1,000 different forms of travel literature are being mailed out at the present time and scores of people are being routed from coast to coast. The company has received many letters commending the service.

The Continental company is again furnishing gasoline and lubricating oils for the 360 busses and trucks operated by the Yellowstone Park Transportation Co. in Yellowstone Park. The park season includes June, July and August. The truck and park equipment travels approximately 1,250,000 miles in the three-month period. Approximately 250,000 gallons of gasoline are consumed.

GREAT BRITAIN IMPORTS GAIN FIRST SIX MONTHS

NEW YORK, Aug. 9.—Imports of petroleum into Great Britain during the first six months of 1930 showed a substantial increase over the corresponding period last year, according to figures compiled by the British Board of Trade. Imports figures, with comparisons for the previous two years, follow:

Jan.-June	Imperial gallons—Crude oil	Refined oil
1930	228,073,100	995,685,522
1929	226,033,150	875,091,741
1928	246,027,009	803,235,872

Imports of crude petroleum from Persia for the first half of 1930 were 159,834,934 gallons, against 155,825,545 gallons in the first six months of 1929.

Imports of refined oils into Great Britain for the period, with comparison for the corresponding months last year, follow:

	Imperial gallons—First six months— 1930	1929
Motor spirit	525,589,830	400,744,076
Illuminating oil	117,774,671	141,358,324
Lubricating oil	54,089,262	49,686,453
Gas oil	84,981,950	56,716,577
Fuel oil	222,879,462	216,392,625
Other oils	10,370,347	10,193,686

While the United States continued the principal supplier of all refined products, save fuel oil, to the British market, increasing competition by Russia and Persia was reflected in a steady growth in the percentages handled by those countries.

CALIFORNIA GASOLINE SALES SHOW INCREASE

Gasoline consumption in California, based on actual sales for the first half of 1930, is running a little better than 8 per cent in excess of last year. During the past six months marketers sold 643,196,704 gallons of gasoline, as compared with a total of 595,288,173 gallons sold to consumers in the first half of 1929. This represents a net gain of 47,908,531 gallons. Gasoline sales during the first quarter of 1930 were 2.68 per cent in excess of the amount sold during a similar period of last year. Sales during the second quarter of 1930 were 13.08 per cent in excess of the quantity sold during the second quarter of last year. Although only a portion of the recent gasoline war is reflected in gasoline sales for the second quarter of 1930, these figures indicate that major refiners recovered a large part of the gallonage previously lost to independent refiners who built up sales by underselling stabilized prices. The Standard, Shell, Union, Associated, General Petroleum and The Texas Company all registered substantial increases in gasoline sales for the second quarter of 1930 over the corresponding period of 1929. The Richfield Oil Co. was the only major marketer which failed to equal its 1929 record. This company sold 39,333,398 gallons in 1929, as compared with 39,283,492 gallons, a net loss of 49,906 gallons. The Sunset Pacific, Wilshire Oil Co., Western Oil & Refining, Hercules, Macmillan Petroleum, Hancock, Vernon Oil & Refining, Seaside, Lakeview Oil & Refining, St. Helens Petroleum, Edington & Witz and the Holly Oil Co. all showed smaller sales during the second quarter of 1930 than in the second quarter of 1929. The General Petroleum Corp., a subsidiary of the Standard Oil Co. of New York, and the Rio Grande Oil Co. showed increases in gasoline sales for the second quarter of 1930 over 1929 of 12,505,791 gallons and 1,401,664 gallons, respectively. Refiners who have built up their gasoline sales by a constructive policy of advertising instead of resorting to price cutting maintained their relative position in the face of competitive selling.

TENNESSEE FIELDS

(Continued from Page 79)

strings of tools in an effort to open up a gas field.

T. J. Newell and others are drilling at about 450 feet in their No. 2 Oakley, 8 miles north of White Cloud in Dickson County. Their No. 1, same farm, seems a better gasser than at first reported. It found the gas at 215 feet below the contact of the Devonian and Ordovician limestones. Wood & Kenyon are drilling at 200 feet on their No. 1 Turner, about 1 mile north of the Oakley farm.

Gas Well Capped

The Cumberland Oil Co. is drilling at 535 feet on its No. 2 Garrett farm near Livingston, in Overton County. Its No. 1, same farm, found a gas sand at 640 feet and the well has been capped. The location is only a short distance from the unusually large wells of Pratt and others of Illinois near Fox Springs School on Obey River and Mitchell Creek.

Kirkwood & Campbell of Kansas City are still fishing at 1,600 feet on their well 6 miles north of Cookeville in Putnam County. The firm got salt water at 800 feet in its second attempt to find gas at Carthage. The records show Blick & Sons, Celina operators, drilled a well on the south bank of the Cumberland River opposite Carthage about three years ago and picked up a gas sand at 800 feet, 500 feet below the Pencil Cave. Business men of Carthage negotiated for the well or offered to help the Blicks pipe the town, according to reports, but nothing came of it and the well was plugged. Later the Blicks started a 2-inch line from their oil production on Lock's Branch 6 miles north of Gainesboro to Carthage, the nearest railroad point, 36 miles away, after laying the line some 8 miles, for some reason the project was abandoned 2 miles below Gainesboro and the proprietors suspended drilling operations at the same time.

Geological Department Busy

The Tennessee State Geological Department is alert and doubtless in anticipation of activity along the northern tier of counties has had Dr. Ervin Pohl of Vanderbilt University in the field this summer, studying the various sections in Sumner, Macon and Clay Counties where the strata overlying the Black shale predominate. Dr. L. C. Glenn, of Vanderbilt, had a great deal to do with the development of Allen and Warren Counties in Kentucky and his comments and reports were eagerly sought by the more progressive operators. There is expected to be the same interest in Doctor Pohl's work on the Tennessee side of the line.

The lease superintendent of the old Tinsley Bottom Pool has been directed to contract for several wells to be drilled at once. This was a famous pool in 1925 to 1928 and is still averaging better than 1 bbl. per well. These wells often produced from 300 to 500 bbls. flush and all had heavy flows of gas which was permitted to blow off without any attempt being made to conserve it. The best pays were from 250 to 500 feet below the Pencil Cave though there was some production in the Upper and Lower Sunnybrooks. A syndicate of Terre Haute bankers purchased the property of the Defoe Brothers three years ago and disposed of the oil locally, mostly to steamboat operators.

A report has been received that the Ava Oil & Gas Co.'s No. 5 on the Mary E. Williams farm, at Fox Springs, in Clay County, drilled over two years ago, and never much of a producer, has begun unexpectedly to make oil, pumping 6 bbls. per hour. No. 3 has been drilled a few feet deeper to the same horizon as No. 5 and is also pumping 6 bbls. an hour. If this continues, more of the wells in the Fox Springs area are expected to be deepened.

KENTUCKY FIELDS

(Continued from Page 82)

at a depth of 456 feet, which is a lower pay sand for the Scottsville area.

In eastern Kentucky, Clay County, the Petroleum Exploration Co. brought in two nice gas wells in No. 1 Theodore Spurlock farm, and No. 1 on the Rawlings farm.

In Ohio County, Taffey Field, the Three "C's" Oil & Gas Co. is drilling No. 5 on the Hill Rhodes 72 acres. Carpenter, Cable and others are drilling No. 2 Margaret Stinnett farm, same pool. James C. Ellis and others' No. 6 Don Mitchell farm, in Bell's Run area, is reported in but no statement made as to its value.

McLean County is getting a play, most of which are tests away from production. Olean Petroleum Co. is drilling No. 1 Sam Harris farm. James C. Ellis is drilling No. 1 Owen Simmons farm, 3 miles north of Calhoun, also No. 1 on the George Nichols farm; also drilling No. 1 J. D. Bailey farm, in the Grindstone Hill area of the county. McLean Development Co. is drilling No. 1 J. C. Jones farm. Ohio Oil Co. is drilling No. 4 on the G. B. McManama 184 acres. Cameron, Trout and others are drilling No. 1 Mattie Vaughn, and Shearer & Crabtree are drilling No. 1 Eugene Cravens farm. Prairie Oil & Gas Co. is drilling wells in the county, being Nos. 1 and 2 Virgil Mackmore; No. 1 Will Mackmore; No. 1 Louisa Thompkins, and No. 1 J. H. Pate farms.

New wells started up in the Niagara Pool, of Henderson County, are T. J. & L. Oil & Gas Co.'s No. 2 on the J. E. Farley 63 acres; Evansville Syndicate's No. 1 A. Sights, and Pearson Petroleum Co.'s No. 1 Lee Busby farm.

Petroleum Exploration Co. made a location for a wildcat in Leslie County, which adjoins Clay County to the east and southeast of Owsley County, and looking for gas. The test is on land owned by Lucy A. Nield.

Meely Oil Co. will start another well at once on the Taylor farm, 5 miles north of Scottsville, in Allen County.

MAY GASOLINE TAX REPORTS SHOW LOSS

(Continued from Page 154)

tax upon which, if paid, is subsequently refunded.

GASOLINE CONSUMPTION BY STATES, MAY, 1930

	Month of May	
	1930 (gallons)	1929 (gallons)
Alabama	15,083,000	16,100,000
Arizona	6,444,000	5,983,000
Colorado	14,620,000	11,663,000
Connecticut	19,697,000	18,626,000
Delaware	3,171,000	2,898,000
District of Columbia	7,162,000	6,493,000
Florida	18,183,000	18,554,000
Georgia	18,814,000	18,916,000
Idaho	5,525,000	4,982,000
Indiana	42,089,000	49,280,000
Iowa	32,075,000	31,644,000
Kansas	30,380,000	31,119,000
Kentucky	15,163,000	13,975,000
Louisiana	15,249,000	14,915,000
Maryland	14,266,000	14,495,000
Massachusetts	47,881,000	46,974,000
Michigan	74,214,000	70,084,000
Minnesota	32,838,000	34,950,000
Mississippi	12,067,000	12,783,000
Missouri	37,080,000	34,762,000
Montana	10,000,000	9,821,000
Nebraska	17,798,000	18,855,000
Nevada	1,614,000	1,315,000
New Hampshire	5,712,000	5,188,000
New Jersey	49,590,000	43,759,000
New Mexico	4,458,000	3,699,000
North Carolina	20,343,000	22,663,000
North Dakota	11,914,000	15,850,000
Ohio	94,577,000	82,914,000
Oklahoma	26,382,000	25,894,000
Oregon	14,543,000	13,867,000
Rhode Island	7,200,000	7,048,000
South Carolina	10,349,000	10,005,000
South Dakota	12,237,000	13,336,000
Tennessee	18,804,000	17,002,000
Texas	67,881,000	62,709,000
Utah	5,521,000	5,552,000
Vermont	4,287,000	3,954,000
Virginia	20,658,000	18,322,000
Washington	23,216,000	22,588,000
West Virginia	13,139,000	11,158,000
Wisconsin	41,164,000	38,163,000
Wyoming	3,136,000	3,293,000
Total	946,524,000	906,151,000
Daily average	30,533,000	29,231,000
Increase over previous year:		
Amount of increase	40,373,000	.....
Percentage increase in daily average	4.5%	.....
Illinois	88,502,000	.....
New York	.....	107,489,000

F. J. OAKES, ENGINEER, DEAD

Frank J. Oakes, 54, general superintendent of the Dodge Works of Link-Belt Co., Indianapolis, Ind., died suddenly at his home of apoplexy.

CONTINENTAL OFFICIALS ON INSPECTION TOUR

D. J. Moran, president of Continental Oil Co., and a party of other officials composed of E. J. Nicklos, vice president in charge of production; E. S. Karstedt, vice president in charge of marketing, and Harry Kenedy, general sales manager, are on an inspection tour of the company's properties. The party is traveling in the company's Ford trimotor monoplane and will go as far south as Monterrey, Mexico, and north to Edmonton, Canada. The route includes stops at Wichita Falls, Fort Worth, Houston and Brownsville, Tex., Monterrey, Mexico, Laredo, San Antonio and San Rita, Tex.; Jal, Albuquerque and Shiprock, N. Mex.; Kingman, Ariz.; Los Angeles, Calif.; Las Vegas, Nev.; Salt Lake City, Utah; Butte and Great Falls, Mont.; Calgary, Edmonton and Alberta, Canada; Casper, Wyo.; Denver, Colo.; Lincoln, Neb.; Chicago, Ill.; Columbus, Ohio; Baltimore, Md.; Richmond, Va.; Newark, N. J., and return to Ponca City.

The picture shows the group at Fort Worth, Tex. From left to right they are: T. H. Lawson, Wichita Falls; George McIntyre, general manager Texas and New Mexico division, Fort Worth; Mr. Moran, Ponca City; Barney Holland, Fort Worth; L. R. Milne, Ponca City; Albert Martin, Dallas; Mr. Nicklos, and Stacey Dorn, Fort Worth.

WILDCAT OPERATIONS IN SOUTHWEST TEXAS

(Continued from Page 54)

Southern Crude Oil Purchasing Co.'s No. 1 M. Dahl, 887 ft. E line, 1,584 ft. N line of Mena Dahl 224-ac. tract in George Pagen Sur. ..... T. D. 4,350 ft.; dry and abandoned; carried as proven by error.

BEXAR COUNTY

Moore-Jauer's No. 1 Holly R. Ellison ..... T. D. 2,150 ft.; fishing.

K. M. S. Petroleum Co.'s No. 1 E. Salicky, 132 ft. from E line, 10 ft. S line of tract, Blk. 15, Mission Gardens ..... Location.

McElreath & Suggett and Wentz Oil Corp.'s No. 1 A. B. Stephens, 2,100 ft. to N line, 960 ft. to E line of tract in the P. W. Hays Sur., 7 miles E of San Antonio ..... T. D. 1,674 ft.; abandoned dry 50 ft. in Edwards.

Morgan Bros.' No. 1 Barkmeyer, 1,650 ft. to N line, 600 ft. to W line of 600-ac. tract in the P. Villapando Sur., 8 miles SE from San Antonio ..... T. D. 700 ft.; shut down.

J. M. Russell's No. 1 F. L. Price, 1,590 ft. to N line, 660 ft. W line of tract in Angel Navarro Sur. ..... T. D. 735 ft.; casing hung up; moving in rotary.

J. M. Russell's No. 1 A. O. Miles, 1,600 ft. N line, 600 ft. W line 450-ac. tract, Angel Navarro Sur., 10 miles S from San Antonio ..... T. D. 708 ft.; shut down.

W. R. Swearingen et al's No. 2 Halverdier (109-ac.) 300 ft. SE of No. 1 in the J. Perez No. 57 Sur. ..... Location.

Swearingen Oil Co.'s No. 6 A. J. Swearingen, 150 ft. W line, 1,100 ft. S line of 100-ac. tract, Sur. No. 52 ..... Location.

Swearingen Oil Co.'s No. 5 Fee, 30 ft. S of No. 4, Sur. 52 ..... Location.

Swearingen Oil Co.'s No. 1 J. Halverdin, 1,997 ft. W line, 150 ft. SW line of 109-ac. tract in the J. Perege No. 52 Sur. ..... T. D. 718 ft.; sand 699-718 ft.; slopping oil over top of casing; setting up storage.

Henry Yelvington et al's No. 1 Beck, 355 ft. from W line, 310 ft. from S line 100-ac. tract, SW cor. of P. W. Hays Sur., 7 miles E from San Antonio ..... T. D. 1,470 ft.; shut down.

CALDWELL COUNTY

J. T. Callahan's No. 1 W. H. Callahan, 630 ft. S line, 2,280 ft. W line 176-ac. tract in the J. R. Miller Sur. ..... Drlg. 2,505 ft.; in Georgetown; preparing to set csg. in top of chalk.

W. E. Allaun's No. 1 Cosey, SW cor. of tract ..... Location.

W. E. Allaun's No. 2 McKean, 300 ft. W of No. 1 ..... Location.

Humble Oil & Ref. Co.'s No. 12 F. Gray, 150 ft. N line, 253 ft. W line of tract in the J. Hinds Sur. ..... T. D. 2,512 ft.; completed; initial production estimated 500 bbls.

CALHOUN COUNTY

The Texas Company's No. 1 Thomas in the J. D. Tilly Sur. ..... T. D. 3,425 ft.; drlg. in sticky shale.

COLORADO COUNTY

Penn Oil Co.'s No. 1 H. C. Wilson, 450 ft. from W line, 450 ft. from N line of 50-ac. tract in the John McCrosky Sur., 5 miles E from Columbus ..... T. D. 4,738 ft.; dry and abandoned.

CONCHO COUNTY

Turner et al's No. 1 Borsig, 150 ft. from S of NE cor. of G. Emmig Sur., 6 miles W from Paint Rock ..... T. D. 735 ft.; shut down.

Beasley et al's No. 1 S. Waring estate, 1,320 ft. from S and E lines of Sur., Abstract 2,120 in the A. T. Robinson Sur. ..... Machine.

COMAL COUNTY

Caldwell & Lanier's No. 1 T. J. Byler, 175 varas from W line, 370 varas from N line of 320-ac. tract in the H.E.&W.T. No. 5,894 Sur. ..... T. D. 120 ft.; drlg.

New Braunfels Oil & Gas Co.'s No. 1 Adolph Seidemann, 269 ft. to NE line, 470 ft. to NW line of farm in the A. M. Esnecuricas 11-League Sur., 1 mile SE from New Braunfels ..... T. D. 314 ft.; drlg.

DEWITT COUNTY

H. T. Roe's No. 1 Leinhardt ..... T. D. 2,170 ft.; shut down.

DUVAL COUNTY

Vacuum Oil Co.'s No. 1 Duval County Ranch Co., 3,143 ft. N line, 1,368 ft. S line, Sur. 220 ..... Location.
Sal Oil & Gas Co.'s (Southern Oil Co.) No. 2 Welder-Wood, 1,980 ft. E line, 2,490 ft. N line, Sur. 215..... T. D. 2,130 ft.; drlg.
T. W. Callahan and W. M. Howard's No. 1 J. M. Luby, 3,960 ft. N line, 3,960 ft. W line, Sur. 24 ..... T. D. 3,760 ft.; drlg.
Putnam & Walsh's No. 1 Hagist, 570 ft. N line, 150 ft. E line, Blk. 5, Sur. 269 ..... T. D. 2,310 ft.; drlg.

EDWARDS COUNTY

Phillips Pet. Corp.'s No. 2 A. G. Holman, 320 ft. from N and E lines of SE of tract, C.C.S.D.&N.G.R.G. Sur. No. 25 ..... T. D. 4,120 ft.; setting 8¼-in. csg.
James Dalglish's No. 3 Peterson, 850 ft. N line, 1,100 ft. W line of Sec. 82, Blk. E in the H.E.&W.T. Sur... Location.
James Dalglish-Morrow's No. 1 Peterson, NW cor., Sec. 82, Blk. E, H.E.&W.T.R.R., NE cor. of county in the H.E.&W.T.R.R. Sur. ..... T. D. 1,350 ft.; drlg.

FRIO COUNTY

Simms Oil Co.'s No. 1 ..... Location.
A. H. Wray's No. 1 Burns estate, 700 ft. N, 330 ft. E of C Sec. 123, Antone Hupzor ..... T. D. 65 ft.; set 10-in. surface csg.

GOLIAD COUNTY

Union Prod. Co.'s No. 12 George Ray, 2,350 ft. SW of NE line, 330 ft. NW of SE line George A. Ray 400 ac. in the Wm. Southerland Sur. ..... T. D. 4,465 ft.; coring.
A. G. Riemenschneider's No. 1 A. T. Fromme, 275 ft. from N line, 912 ft. W line of 300-ac. tract, P. Dexter Sur. ..... T. D. 2,430 ft.; standing.

GONZALES COUNTY

Mardon Oil Co.'s No. 1 Borrer, 150 ft. N and W in the James Stewart Sur., 5 miles NW from Waelder..... T. D. 1,850 ft.; shut down.
Mardon Oil Co.'s No. 1 Robinson ..... T. D. 3,018 ft.; drlg. in sticky sand and shale.
Linden Pet. Corp.'s No. 1 Hensley, 650 ft. N line, 1,110 ft. W line of J. W. Hensley 100 ac. in the James Smith ..... T. D. 450 ft.; drlg. in shale.
Lake Oil Co.'s No. 1 A. V. Campbell ..... Rigging up rotary tools.
United North & South Dev. Co.'s No. 2 Preston, 1,050 ft. NE, 450 ft. NW of upper S or SW cor. of Oethkin one-third league, 900 ft. SE of Prestin No. 1.... Location.
Acme Oil & Royalty Corp.'s No. 1 Weber, Thomas Wright Sur. ..... T. D. 2,308 ft.; abandoned.
A. J. Keiffer et al's No. 1 B. B. Dix, 550 ft. W of E line, 2,775 ft. N of S line (Guadalupe River) in the Ira Nash Sur., 4 miles SE from Darst Creek ..... T. D. 2,816 ft.; hole cleaned; resumed drlg.; now coring.
Finnell & Elam's No. 1 J. F. Robinson, 2,000 ft. N line, 4,420 ft. E line, in the J. H. Livergood, 2½ miles NE from Waelder ..... T. D. 3,075 ft.; drlg.

GUADALUPE COUNTY

Adams & Lyles' No. 1 Otto Nitche, 1,000 ft. S of N line of farm, 2,200 varas S of N line (Guadalupe River), 2,700 varas W of E line of Jesus Canter Sur., 5 miles SE from Seguin ..... T. D. 2,390 ft.; coring.
Guy Lewis' No. 1 Arno Link ..... T. D. 847 ft.; shut down.
Cranfill & Reynolds' No. 1 McIntire, 150 ft. to E line, 150 ft. to S line of 100-ac. tract in the A. Gibson Sur., 6 miles SE from Seguin ..... Spudded in.
J. S. Suttle's No. 2 A. Baenzinger, 40 ft. E line, 150 ft. S line of tract in the A .O. Mansola Sur., 5½ miles S from Seguin ..... Location; to skid derrick and rig from No. 1.
Grayburg Oil Co.'s No. 2 Wells, 5,730 ft. E line, 2,490 ft. S line of NE cor. of Wells tract in the James D. Baume Sur., 6 miles SW from Darst Creek ..... Rigging up.
Cranfill & Reynolds' No. 1 Wilson, 150 ft. S line, 1,200 ft. to W line 92-ac. tract in the Jesus Canter Sur., 8 miles SE from Seguin ..... Location.
Brown Hinds et al's No. 1 George Altzger, 1,300 ft. from SE line, 1,100 ft. from SW line of 120-ac. tract in A. Mansola Sur. ..... T. D. 1,975 ft.; shut down in Del Rio.
Ray Oil Co.'s No. 1 R. Felsing, 300 ft. NW line, 450 ft. NE line, 120-ac. tract in the M. Baker Sur. ..... T. D. 780 ft.; drlg.; show of oil at 702 ft.
Whisenant & Fowler's No. 1 B. Blumberg, 1,120 ft. NW line 3,000 ft. NE line of Moses Baker Sur. ..... T. D. 1,005 ft.; abandoned reported in error.

HAYS COUNTY

Hailey & Whittington's No. 1 Heidenrich ..... T. D. 735 ft.; shut down.

JACKSON COUNTY

The Texas Company's No. 1 Mitchell, 1,750 ft. E, 880 ft. N of SW cor. Ewing Sur. ..... T. D. 5,971 ft.; drlg. in hard sandy shale.

JIM WELLS COUNTY

J. Walsh et al's No. 1 W. D. Wade, 1,035 ft. NE line, 300 ft. NW line of N cor., Lot 1, Blk. C, W. H. Bode Subd. ..... T. D. 210 ft.; set 10-in. surface csg.; waiting on cement.

KARNES COUNTY

Clayton & Pierce's No. 1 Barnett in the Alex Hunter Sur., 6 miles N of Karnes City ..... T. D. 2,916 ft.; steaming up to resume.
J. F. Morrissey et al's No. 1 Ragsdale, 660 ft. SW of C of NE line of 170-ac. farm in the McCoull Sur..... T. D. 1,380 ft.; resumed drlg (corrected depth).
Dr. Hewitt's No. 1 W. E. Porter, 650 ft. from N line, 700 ft. from W line of 416-ac. tract in the Victor Blanco Sur., 8 miles SE from Runge ..... T. D. 2,700 ft.; drlg. in shale.

KENDALL COUNTY

Borgett et al's No. 1 Haag, W Avery Sur. ..... T. D. 940 ft.; drlg.
A. S. Mowinkle's No. 1 Kaston, 150 ft. from N line, 150 ft. from E line of tract, Sur. No. 724, 9 miles due W of Kendalia ..... T. D. 900 ft.; drlg.
Sitten et al's No. 1 Garvin, C of NE of D. L. Richardson Sur. in the D. L. Richardson Sur., 1 mile NE from Kendalia ..... T. D. 710 ft.; drlg.
Dickinson et al's No. 1 Edmondson, 150 ft. from S line, 350 ft. from W line of tract in the J. O. Blair No. 72 Sur., 1 mile NW from Kendalia ..... T. D. 40 ft.; spudded in and shut down.
Dixon Oil Co.'s No. 1 Ottmer Behr, W of H.T.&B.R.R. Sur., 3½ miles SE from Sisterdale ..... T. D. 1,790 ft.; drlg.
P. B. Sterling's No. 1 R. J. McCrocklin, 1,350 ft. from N line, 250 ft. from W line of the B. G. Owens Sur., 4 miles W from Kendalia ..... T. D. 410 ft.; standing.
R. M. Perkins' No. 1 J. Lawhon, Sec. 10, 2,475 ft. E line, 1,488 ft. S line ..... T. D. 550 ft.; drlg.; have hauled out 800 ft. of 8-in. csg.

KERR COUNTY

Evans et al's No. 1 Love Ranch, 100 ft. from S line Sur. 1,597, 1,000 ft. E of W line of J. Martinez No. 1,594 Sur. ..... T. D. 700 ft.; setting 12½-in. csg.

KLEBERG COUNTY

Bowen & Sarles' No. 1 Robert, H. Simmons in the A. Houston Sur. No. 611, Sec. 7, King Subd., 150 ft. out of NW cor. of SW ..... T. D. 1,580 ft.; shut down; W.O.C.

KINNEY COUNTY

Magnolia Pet. Co.'s No. 1 Whitehead-Wardlaw, 2,640 ft. W line and S line of Meliton Valdez grant .... T. D. 3,000 ft.; drlg.
Mardon Oil Co.'s No. 2 Jim Clamp ..... T. D. 2,714 ft. in hard sand; coring.
A. Blume et al's No. 2 Herbst, 1,731 ft. W and S lines of Sur. in the Poindexter-Burns Sur. ..... T. D. 275 ft.; shut down.

KIMBLE COUNTY

Lindley Bros.' No. 1 Anderson, Sec. 178, Mubenger Sur... T. D. 990 ft.; shut down.
Dixie Oil Co.'s No. 1 Bodel, 900 ft. W of N line of Sec. 440, in Sec. 80, in the J. S. Patterson Sur. ..... Location.
C. L. Bryant et al's No. 1 Lambert, 7,700 ft. N and W lines of F. Lotta Sur. ..... T. D. 685 ft.; shut down.

LIVE OAK COUNTY

Catlett & O'Neil's No. 1 Pat Pugh, 620 ft. S line, 150 ft. E line of Pugh tract, Abstract 189, in the E. Games Sur. No. 253, 6 miles N from Dinero ..... Location.
Jacob, Buzzini & Pickett, Inc.'s No. 1 C. E. Kay, in the Bridgett Fadden Sur., 3 miles E from George West.. Location.
O. Stalley et al's No. 1 Nichols, 2,000 ft. from W line, 500 ft. from S line in the Ayers Sur. ..... Location.

LEE COUNTY

Burt et al's (M. D. Rickett) No. 1 R. C. Sanders ..... T. D. 2,810 ft.; shut down in shale
Fedor Oil Co.'s No. 1 Aug. Schimank ..... T. D. 2,247 ft.; temp. abandoned
A. H. Wheeler and associates' No. 1 Fee, 14 miles NE from McDade, Blk. 47, H. Donohoe Sur. ..... T. D. 100 ft.; drlg. in shale.

McMULLEN COUNTY

E. H. Coquot's No. 1 Fahler, 2,300 ft. to N line, 300 ft. E line of 1,000-ac. tract in G. Pettus Sur. ..... T. D. 2,104 ft.; dry and abandoned.
Mogul Pet. Co.'s No. 1 Martin, 150 ft. NW line, 150 ft. to SW line of E. Melon No. 212 Sur. ..... Spudded in.

MAVERICK COUNTY

Rycade Oil Corp.'s No. 6 Chittim, 1,445 ft. from S. 320 ft. from W of Sec. 116, Blk. 7, I.&G.N. Sur. ..... T. D. 3,474 ft.; drlg.
Rycade Oil Corp.'s No. 5 Chittim, 600 ft. W of No. 3 Chittim, 500 ft. E line, 225 ft. from S line of SE Sec. 115, Blk. 7, in the I.&G.N. Sur. ..... T. D. 4,470 ft.; drlg.
Rycade Oil Corp.'s No. 5 Sullivan, in C of Sec. 82, Blk. 7, in the I.&G.N. Sur. ..... T. D. 6,868 ft.; fishing for tools

MEDINA COUNTY

Pat Armstrong's No. 1 C. W. Butts, in George C. Hanson Sur. ..... T. D. 1,918 ft.; drlg.
B. F. Newhaus et al's No. 1 Fusselman, 200 ft. E and S lines of tract (320-ac.) in the M. Castro Sur..... Location.
Pearson Oil Co.'s No. 6 Medina Valley Inv. Co., 2,500 ft. S and E line of lease of Isom Palmer Sur. ..... T. D. 1,000 ft.; hole full of water shut down.
Pan American Dev. Co.'s No. 1 Antonio Hart, in Harrison Sur. No. 799, 15 miles S from Hondo ..... T. D. 1,910 ft.; shut down.
National Oil Co.'s No. 1 Howard, 1,750 ft. E of W line, 1,854 ft. N of S line of survey in the John George Sur. No. 9, 10 miles S of Dunlay ..... T. D. 1,645 ft.; not to drill in till completion of Zapata County well.
Caldwell et al's No. 1 L. W. Burrell ..... T. D. 518 ft.; drlg. in Buda
Donaldson Oil & Dev. Co.'s No. 2 Hillenmeyer, James Hillenmeyer No. 25 Sur., 500 ft. to E line of survey, 150 ft. to S line of N half of survey ..... T. D. 200 ft.; shut down.
Pat Armstrong's No. 1 Crawford, 1,389 ft. N line, 2,550 ft. E line of survey, 478.6 miles W from Devine..... T. D. 400 ft.; shut down.
Kirby Pet. Co.'s No. 2 Fusselman, 200 ft. each way out of the SE cor. of Sec. 43 of H. Castro Sur. ..... Location.

NUECES COUNTY

Independent Oil & Gas Co.'s No. 1 Baldwin, 330 ft. each way out of NE of the J. C. Russell Subd., Blk. 11, 3 miles W from Corpus Christi ..... T. D. 1,200 ft.; waiting on csg.
R. A. Thompson et al's No. 2 Lawrence-Harrell, 300 ft. from N and E lines of Blk. 19 ..... T. D. 1,570 ft.; drlg.

SAN PATRICIO COUNTY

Magnolia Pet. Co.'s No. 1 Freeman, 660 ft. S and W lines of NW half of 80-ac. tract, Sec. 57, in the E. J. McGloin Sur. ..... T. D. 5,526 ft.; previously reported as completed; now rigged up to drill deeper.
George B. Pickett's No. 1 Baldwin, 9,000 varas due E of Denton, 1,200 ft. S of the SE cor. of O'Neil Sur., Abstract 211 ..... T. D. 4,012 ft.; moving in heavy rig to go to 6,000 ft.
J. L. Kennedy's No. 1 McRae, 1,170 ft. NW of the center of the SE line of 500-ac. tract. ..... Building derrick.
Saxet Oil Co.'s No. 1 Carroll, 800 ft. N line, 130 ft. to W line, Lot 32-A, Sec. 32 of the fourth subd., Taft farms ..... Moving in tools.
Union Prod. Co.'s No. 4 Welder, 3,000 ft. N line, 4,500 ft. E line of tract in the E. Portillo Sur. ..... Rigging up.
G. B. Peterman et al's No. 1 Crow, 150 ft. from S line, 170 ft. from W line of Sec. 24 of the Fulton-Coleman Pasture Lands, J. H. Paul Subd. ..... Derrick.
G. B. Peterman et al's No. 1 Foster, 150 ft. from E line, 1,420 ft. from N line of Blk. 5 of the Welder-Coleman-Fulton Sbd., 3½ miles W from Sinton ..... Location.
Cosden Oil Co.'s No. 1 Schmolsteig, C of SE, Sec. 9, H. Powell Subd. in the B. Blanchard Sur. ..... Set 10-in. csg. 1,200 ft.
LaFeria Oil & Gas Co.'s No. 1 C. C. Smith, in J. C. White Sur., 690 ft. to N line, 350 ft. to E line..... T. D. 3,875 ft.; drlg.

STARR COUNTY

I. V. Maclean's No. 1, Tract No. 5, 1,063-ac., Porcion 81, Juan Jose de la Garza in the Falcon grant ..... T. D. 150 ft.; drlg.
Kush Exptln. Co.'s No. 1 Kelsey-Bass ..... T. D. 380 ft.; drlg.
J. L. Smith's No. 1 Welch, Perdernal Sur. ..... T. D. 925 ft.; showed gas in sand

UVALDE COUNTY

E. Anglin et al's No. 1 U.P.P., 1,500 ft. from NW line, 7,450 ft. to NE line of Manual Leal Sur., 10 miles SE from Uvalde ..... T. D. 1,190 ft.; shut down in clay
Mission Drlg. Co.'s No. 1 Uvalde Pecan Plantation in the L. Taylor Sur., 11 miles S from Uvalde ..... Duplication of Ed Anglin's No. 1 Pecan Plantation; dropped.
Waldrop & Welch's No. 1 E. R. Edmonds, 1,750 ft. NW, 7,200 ft. W of Sec. 71, in the A. Gomez Sur., 8 miles S of Uvalde ..... T. D. 1,193 ft.; moving in heavier rig.
Phantom Oil Co.'s No. 1 Claudt, Sec. 611 ..... T. D. 2,435 ft.; drlg.

VICTORIA COUNTY

Attlee Drlg. Co.'s No. 1 M. West, 5,100 ft. to NE line, 1,050 ft. to NW line of 1,800-ac. tract in the P. DeWitt Sur. ..... T. D. 1,580 ft.; temp. abandoned
The Texas Co.'s No. 1 A. M. McFadden, 1,550 ft. N and E lines of H. Bonny Sur. ..... T. D. 2,500 ft.; drlg.

WEBB COUNTY

J. L. Elliot's No. 1 Esperonza Land & Stock Co., 950 ft. from N line, 2,231 ft. E line, Sur. 815 ..... T. D. 1,200 ft.; drlg.

ZAPATA COUNTY

T. H. Ward's No. 1 Uribe, 150 ft. NW line, 150 ft. SW line, Blk. 8 Subd., Share 7, Partition No. 6, T. Uribe Partition of Jose V. Borrego Sur. ..... Location.
B. F. Nixon's No. 1 A. Gutierrez, 170 ft. S line, 332 ft. E line, Lot 5, Blk. 8, Partition 10, Borrego grant .... T. D. 50 ft.; standing.
Penny Prod. Co.'s No. 1 Juan V. Cuellar, Jr., et al, 175 ft. NE line, 175 ft. SE line Poppas Subd., Porcion 33 and 34, Blk. 1, Sur. 2 ..... T. D. 150 ft.; drlg. (corrected depth).
Penny Prod. Co.'s No. 1 Trevino, 300 ft. SE line, 200 ft. NE line Marts & Beavers Subd. of Porcion 2 and 3. Blk. 6, Sur. 4 ..... T. D. 757 ft.; moving in heavier rig.
National Oil Co.'s No. 1 D. B. Adams ..... T. D. 1,180 ft.; preparing to set csg.

ZAVALA COUNTY

Krebs & Davis' No. 1 Weatherby, E center of NW of Sec. 44, Blk. A, Adams, Beaty & Mouton Sur., 4 mi. E from Loma Vista ..... T. D. 1,782 ft.; drlg.
Ed Anglin's No. 5 Pryor ..... T. D. 1,034 ft.; drlg. (corrected depth).
Texas Gas Utilities Co.'s No. 1 Ike T. Pryor, Jr. ..... T. D. 800 ft.; drlg.
Weigand Bros.' No. 1 W. L. Gates, Hooper & Ware Sur. No. 13, 1,320 ft. S of N line, 1,220 ft. W of NE cor. Sur., about 16 miles S of Batesville ..... T. D. 2,350 ft.; dry and abandoned.

IMPERIAL OIL, OPERATING 4,000 TRUCKS, KEEPS CAREFUL RECORDS

Transportation figures prominently in the activities of Imperial Oil, Ltd., one of the largest producers, refiners and marketers of petroleum products in the British Empire.

A fleet of nine large ocean-going motor ships, one of which, the 22,715-ton "C. O. Stillman," is the largest tank ship afloat, and numerous smaller ships, barges, tenders and lighters for operation on the Great Lakes and on rivers and in harbors in Colombia and Peru give some idea of the marine activities of this company.

Other forms of transportation include dog sleds, mules, aerial cable, pipe line, more than 3,000 railway tank cars, horse-drawn vehicles in small isolated districts, airplanes and the largest fleet of motor trucks in Canada, over 4,000 units being employed by this organization.

The slogan of Imperial Oil, Ltd., is "Everywhere in Canada," and the company's efficiently organized automotive fleet is an important factor in putting real meaning into the slogan. Frequent use is made of this slogan in the company's advertising and it gets a prominent place in filling station signs as shown in an accompanying illustration in which is also shown one of the company's motor trucks, an International Harvester 1½-ton unit.

In the fleet of motor trucks operated by Imperial Oil, Ltd., the largest automotive fleet in Canada, many are Internationals. In the illustration is shown an International Harvester 1¼-ton truck in front of one of the company's filling stations.

Motor trucks in the Imperial Oil, Ltd., fleet are of 1½-ton, 2½-ton and 3½-ton sizes, which respectively carry tanks of 350, 500 and 800 Imperial gallon capacities. The lightest unit, which predominates, is used in rural commuities and to serve the farm trade. It is more flexible and is better adapted to narrow unimproved roads.

Distribution of Load Important

In the selection of vehicles care is taken to insure that trucks are of the proper tonnage capacity, the tendency being toward underloading rather than overloading. Wheel bases of chassis are chosen so that the load will be properly distributed, and tire loads are carefully checked so that the load per wheel will be under rather than over the standard carrying capacities laid down by the rubber companies.

Rear axle gear reductions are selected so that the rates will be as high as possible compatible with reasonable performance. This gives lower fuel consumption. It is maintained that while these considerations may result in a higher initial capital expenditure, maintenance cost is reduced and longer life is added to the vehicle which more than offsets any additional capital outlay.

Another item which receives particular attention in the design of motor trucks in the Imperial Oil fleet is the center of gravity of the load. In the transportation of a liquid load, the load is always in motion. When the truck is started, the load rolls toward the rear of the tank and vice versa when the truck is stopped. The rolling of the load is reduced to the minimum by having the center of gravity as low or as near to the ground as possible and by fitting each compartment of the tank with longitudinal and lateral baffle plates. The tanks are of the elliptical type with the large diameter on the horizontal plane.

Each tank is built up in separate units, the compartments being mounted on diepressed sheet metal bolsters. The tank seat of each bolster is covered with a canvas webbing so as to provide a cushion between the two. A 2-inch air space is provided between each two compartments. After assembly, tack welding strips are used to join the compartments together and the whole is covered with facing band, the object being that should any one compartment become damaged, the tack welding strips can be cut and the compartment removed and readily replaced. The bolsters are also constructed so as to carry four auxiliary tanks for the transportation of lubricating oil. The side tanks are constructed so that it is impossible to stack up barrels or cases on the side of the truck, which would result in overloading.

Pneumatic tires predominate in the

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Imperial Oil fleet. The larger trucks are fitted with disc wheels and dual rear wheels and the smaller trucks with the same size tire both front and rear. In this way all tires are interchangeable, and one spare serves all wheels. This system permits the use of a smaller diameter and a lighter tire and reduces the number of sizes of tires required to be carried in stock at the various repair depots as well as providing a unit which can be conveniently handled by one man.

The de luxe type of cab is used on the various motor trucks. Its construction not only gives longer life but its form gives a more attractive appearance to the completed vehicle. These cabs are fitted with full spring cushions and backs are upholstered in first grade leather.

Trucks Kept Clean and Attractive

The standard colors of Imperial Oil, Ltd., motor trucks are red chassis and wheels and green tank. The cab and engine hood are finished in red striping. Tanks are lettered in gold leaf by means of the decalcomania process, as time is saved in this way and uniformity for the entire fleet is insured. Every effort is made by the company to keep the trucks as clean as possible and to paint them at frequent intervals. A stylish, well-finished truck, with an attractive advertising message thereon, provides the company with valuable advertising.

The company is organized in 12 geographical marketing divisions, each division having a manager, sales manager and equipment manager, the whole being under the general sales department at Toronto, which is also the headquarters of the motor equipment branch. The divisional equipment manager, among other duties, is responsible for the fleet of trucks assigned to him. Direct supervision of the many automotive units is effected by means of road inspectors who travel over their respective territories checking drivers and performing all minor repairs. Each inspector is provided with a 1-ton truck, equipped with panel body, which is fitted with spare parts and tool cabinets, work bench, and floodlight for night work.

Maintenance Garages

The company also, due to wide distribution of its equipment has maintenance garages at convenient centers where overhauls may be effected. In the province of Ontario, for example, there are seven of these repair stations and in the province of Quebec six. Spare trucks are kept at each of these depots; thus, by a system of relief, overhauls are being constantly carried out without interruption to the transportation requirements of the marketing department. By the system of continuous inspection of all vehicles, trucks are kept at all times to a point of maximum efficiency and minor troubles are corrected before they accrue to major maladies, with the result that maintenance costs are not only kept to the minimum but the maximum life is obtained from each vehicle.

Close supervision of the operation of all motor trucks in the Imperial Oil fleet is facilitated by means of a complete system for maintaining records of cost and performance.

A "Service Inspection Report" is utilized by all road inspectors and master mechanics in repair depots. It gives a picture of the mechanical condition of the truck, conditions of the painting, and the care and attention taken of the equipment by the driver. Any laxity on the part of the driver, as shown on the report, is rigorously checked by the equipment manager of the division. All repairs effected by road inspectors and maintenance garages are covered by individual repair sheets which are checked for "time and material" by divisional offices. A "Weekly Garage Report" is also made out by each repair center and it gives to the various offices a comparison of the efficiency of these units.

Forms Filed in Triplicate

These three forms are made out in triplicate, one copy being forwarded to the motor equipment department, Toronto, one copy to the divisional office, and the third is held by the inspector or repair depot. Repair and inspection sheets are filed by equipment number so that a complete record is readily obtainable for each individual piece of equipment. A tire record is also kept for each unit, the number of the tire and the mileage being recorded on the card at time of installation and at time of renewal. In this way tires can be carefully checked for mileage and adjustments made with the rubber companies should they not give reasonable performance.

Other reports record the goods delivered; mileage traveled; gasoline, oil and grease consumed; and the whole is tabulated monthly on the "Monthly Cost of Operating Motor Vehicles" form which gives a comprehensive picture of the work done by individual vehicles. A set-up has been established of maximum and minimum consumption of fuel oil and greases, and deviations either way are checked back for explanations and adjustments. The life of a motor truck depends largely upon its lubrication, but excess use of lubricating oil points to mechanical troubles or station shortages being charged to the motor vehicle.

With some 9,000 employes in its organization in Canada, a large proportion of whom are directly concerned with the operation of the company's big automotive fleet, Imperial Oil, Ltd., naturally figures in a large way in Candaian business. The company engages in all phases of the petroleum industry. It explores for oil, tests potential fields, drills wells, produces oil, transports it to its refineries, refines it, distributes it, and markets it.

RUSSIAN OIL OUTPUT SHOWS BIG INCREASE

NEW YORK, Aug. 11.—Total production of crude petroleum in Russia for the six months ending March 31, the first half of the current fiscal year, is reported as being 7,641,979 tons, as compared with 6,268,540 tons in the corresponding months of the previous fiscal year, an increase of 1,373,439 tons, or 22.9 per cent.

The greatest increase in output was in the Emba region, with Grozny and Baku ranging next in order. Detailed data on production in these three major fields for the period, with comparison with production totals for the corresponding half year in 1928-29, follow:

	Tons	
Baku—	1929-30	1928-29
Lenisk	1,637,752	1,462,285
Surakhany	1,722,746	1,500,623
Bibi-Eibat	1,150,092	863,880
Binagadinsk	191,539	175,880
Grozny—		
Old fields	299,708	316,531
New fields	2,241,153	1,752,628
Voznesensk	16,539	11,221
Malkop	219,716	70,719
Kouban	7,289	.....
Emba—		
Dossor	109,806	35,875
Makat	45,639	28,899

Sales of refined products in Russia during the six months ended March 31, last, are reported at 4,706,927 tons, an increase of 1,063,837 tons or approximately 26.5 per cent over the 3,643,090 tons sold during the corresponding period in the previous fiscal year.

Exports for the period amounted to 4,706,927 tons, an increase of 587,345 tons. The largest increases were in fuel oil and gasoline, which increased 326,664 tons and 120,132 tons, respectively. Exports for the period, by products, were as follows: Fuel oil, 768,628 tons; gasoline, 546,863 tons; kerosene, 431,091 tons; Diesel oil and gas oil, 173,359 tons; other products, 204,598 tons.

Principal buyers of Russian refined products and the quantities taken during the first half of the current fiscal year and the corresponding period in the previous fiscal year were as follows:

	Tons		Increase
Country—	1929-30	1928-29	%
England	422,901	289,881	45.8
Italy	398,956	227,896	75.1
France	234,939	148,562	58.2
Germany	200,409	175,489	14.2
Spain	159,804	139,726	14.4
Egypt	149,154	107,268	39.0
Turkey	110,053	91,747	20.0

PETROLEUM RESOURCES OF JAPAN DESCRIBED BY IMPERIAL GEOLOGIST

By Yoshinosuke Chitani
Geologist, Imperial Geological Survey of Japan

A petroleum belt extends from southern Saghalien and Hokkaido to Nagano Prefecture in the Honshu Island, running along the coast of the Japan Sea. Besides this, small fields are found in the Shizuoka Prefecture in Honshu and the Island of Formosa. In southern Saghalien, oil-bearing strata occur on the west coast of the island. In Hokkaido an oil belt extends from north to south along the west side of the central mountain range. In Honshu, an oil belt continues from the Aomori Prefecture to the western parts of the Prefectures of Akita and Yamagata, and further to Niigata Prefecture where the belt turns to the south and extends to the southern part of Nagano Prefecture. Another separated oil field is located on the Pacific Coast of the Shizuoka Prefecture. In Formosa (Taiwan), an oil belt runs from north to south in the western part of the island, the Byoritsu district in the Shinchiku Prefecture being the most important oil field at present. Petroleum deposits in Japan are found exclusively in marine Neogene formations.

Hokkaido Fields

In Hokkaido, an oil belt extends from north to south along the west side of the central mountain range, passing the provinces of Kitakami, Teshio, Ishikari, Iburi and Hidaka. Petroleum is found also in several districts in the provinces of Nemuro, Kushiro and Oshima.

In Hokkaido, there are three producing fields of Masuhoro, Ishikari and Iburi (Karumai), of which Ishikari is the most important.

The Ishikari oil field is situated on a hilly tract about 8 kilometers northeast of the town of Ishikari. It was begun to be developed as early as 1887, but the progress of the work has been so slow that two-thirds of it still remains untouched. The strata composing the oil field form a broad domal anticline which plunges to the south. The main oil-producing bed is a fine sandstone which belongs to the Wakkanai series, and lies at a depth of 500-600 m., while another shallow oil sand lies 200 m. deep. Initial production is small, measuring on an average of 40-50 koku a day. At present there are about 60 producing wells with an average daily production of 120 koku. (Koku=1.136 bbls.)

Besides the three producing fields mentioned, undeveloped fields at Yenbetsu in Teshi, Yetaibetsu and Tokutomi in Ishikari, and some other localities seem to be promising.

The production of the Hokkaido oil fields in the last five years was as follows: 1923, 14,624 koku; 1924, 25,085 koku; 1925, 48,438 koku; 1926, 45,892 koku; and 1927, 62,709 koku.

Akita Fields

In the Prefecture of Akita, an oil belt extends from north to south along the coastal region, including the districts of Yamamoto, K. Akita, M. Akita and Yuri. It is about 30 to 50 kilometers wide and about 170 kilometers long.

In Akita, there are five producing districts, namely Hibiki, Toyokawa, Kurokawa, Michikawa-Asahikawa and Yuri. The last includes six small fields of Katsurane, Hanekawa, Katte, Uchimichikawa, Tanaka and Oguni.

Development of the Akita oil fields took place far later than in Niigata. The first trial borings by cable were made in 1902, at Izumi in the Asahikawa oil field and Toyomaki in the Yuri oil field. But the work was not very active until 1914, when in the Kurokawa oil field there suddenly appeared a big well which had an initial daily production of over 10,000 bbls. While the Kurokawa oil field was being actively worked, the neighboring fields of Toyokawa and Michikawa were carefully exploited and were subsequently developed as productive districts. Yuri oil fields have been developed since 1921, and have been yielding considerable petroleum. Annual production from all Akita oil fields reached a maximum quantity of about 1,000,000 bbls. in 1921 and it has since gradually diminished, being about 600,000 bbls. in 1927.

The Toyokawa Field is situated on a hilly district, 30-50 m. in height, 2 kilometers east of the Okubo station on the Ou Railway. The oil field consists of shale of the Funagawa series, forming a broad anticline which is disturbed by several small faults. The producing field occupies an area of 4,000 m. in length and 800-1,000 m. in width. The chief reservoirs of oil are located in the fracture zone in the lower part of the Funagawa series and lie 230-400 m. below sea level; besides some oil-bearing tufaceous sand is to be found in the same series. Oil has a gravity of 20°-22° Baume. During the active period there are many wells producing 200-300 koku a day, but at present the total production decreased by 300-400 koku a day.

Kurokawa Field

The Kurokawa Field lies on a hilly tract 12 kilometers north of the city of Akita. The strata composing the oil field consist entirely of shale belonging to the Funagawa series. The oil field structure is a typical domal anticline having its axis running in the general direction of north-south, average inclination of the strata being 20 degrees in both wings. The producing field occupies an area of 3,500 m. in length and 400-900 m. in width. The chief reservoirs of oil in the field are sands in the lower part of the Funagawa series and the upper part of the Onagawa series. Some shallow oil is found in fissures of shale, but this occurs very irregularly. The chief oil-bearing zone lies 400-480 m. below the ground surface. For six or seven years since 1914, this field was the center of the oil industry and there were gushers producing several thousand koku a day. However, the production, has since grad-

SUMMARY OF JAPAN OIL SITUATION

A petroleum belt extends from southern Saghalien and Hokkaido to the Nagano Prefecture in Honshu Island, running along the coast of the Japan Sea. Besides this, small fields are found in the Shizuoka Prefecture in Honshu, and the Island of Taiwan (Formosa). Petroleum deposits in Japan are found exclusively in marine Neogene formations. The chief oil fields in Hokkaido are those of Masuhoro, Ishikari and Iburi, of which Ishikari is the most important. In the Akita Prefecture, oil fields of Kurokawa, Toyokawa, Michikawa and Uchimichikawa are prominent, but now with an aggregate production of only about 600,000 bbls. in a year. The Niitsu, Nishiyama and Higashiyama oil fields in Niigata Prefecture have been developed since about 36 years ago and their total production, together with that from other minor fields in that vicinity reached about 2,000,000 bbls. in 1914. The production, however, has gradually diminished since then and was only about 800,000 bbls. in 1928. In Taiwan, the Byoritsu oil field is the only one which is now productive; but there remains several districts to be developed in the future.

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ually diminished and at present it is 600-700 koku a day.

The Yuri Field, in the coastal region of Yuri-gun, Akita Prefecture includes six small pools at Katsurane, Hanekawa, Katte, Uchimichikawa, Tanaka and Oguni, and produces only a total of 400 koku a day. But it is a profitable field on account of the presence of shallow oil sand to be drilled with simple machines of the Kadzusa type, which are used only in Japan. The field is also very interesting from the geological point of view, because various types of structure are found there.

In the Akita oil field, there are many districts still remaining undeveloped, and among others, those lying on both the northern and southern extremities of the oil field, and that on the Oga peninsula seem worth prospecting.

The production of the Akita oil fields in the last five years was as follows: 1923, 783,173 koku, 1924, 788,309 koku; 1925, 778,299 koku; 1926, 671,180 koku; and 1927, 628,318 koku.

Niigata Fields

The Niigata oil fields are situated almost in the central part of Honshu, along the coast of the Sea of Japan. An oil belt extends from the northeast to southwest for a distance of about 200 kilometers, and is 50 or 60 kilometers wide.

That the crude petroleum of the Niigata oil fields was used as fuel dates back about as far as 300 years ago. Before 1893, all wells were dug by hand or bored by a simple method called "Kazusa-bori." In 1893, the American method of cable boring was successfully applied for the first time at Nishiyama. After the introduction of the new method, the oil industry has been greatly improved and several oil fields have been developed one after another. The rotary system of boring was tried with success at Ige in the Nishiyama oil field in 1912, and since then it has been used in the oil fields along with the cable method.

As a consequence of the application of the cable, as well as the rotary boring, the production of oil was very much increased, especially in the Niitsu oil field, and in 1914 reached about 2,000,000 bbls. The production, however, has since gradually diminished and was only about 800,000 bbls. in 1928.

In the Prefecture of Niigata, there are five producing districts, namely Niitsu, Omo, Higashiyama, Nanokaichi, Nishiyama and Kubiki.

The Niitsu Field is now the most productive in Japan, and lies near the town of Niitsu, 20 kilometers south of the city of Niigata. The field is a low hilly tract extending for about 6 kilometers from north to south, with a breadth of 1,000-2,000 m. The strata seem to form a broad anticline with the axis running in the general direction of northeast-southwest. Oil sands occur in several different horizons, lying at depths between 160-500 m. below the ground surface. The main oil sand interbedded in the Kanazu sand is the most important oil resource of the Niitsu oil field, and extends almost all over the entire field, occupying an area of more than 134 hectares. Its total thickness varies between 10 and 40 m., separated into two or three layers by the intervening shales. The principal oil accumulations are found at the bulges along the anticline, while the intermediate troughs are generally less productive. The Koguchi bulge is the largest with gentle inclination and is most productive in the oil field.

Deep test wells of about 900-1,000 m. or more at Umayose, Higashijima and Mayedani have shown the presence of the same deep oil sands accompanying strong gas, so that these districts are most promising in their future development.

The production of the last five years was as follows:

Year—	Koku	No. of oil wells
1924	443,751	816
1925	412,278	820
1926	356,377	809
1927	328,138	812
1928	250,825	1,071

Nishiyama Fields

Under the name of Nishiyama are included the four oil fields of Amaze, Miyagawa, Nishiyama Proper and Takamachi, of which the last is a newly developed field south of Nishiyama proper.

The oil fields of Nishiyama proper situated near the Nishiyama station, 1½ kilometers northeast of the town of Kashiwazaki, consist of sandy shale, overlying an alternation of sandstone and shale of the Shiiya series, and black shale of the Kubiki series. The oil sand of the field is divided into four zones as follows:

1. The first oil zone lies at a depth between 170 m. and 300 m. below the ground surface and consists of several oil sands. The greater part of this zone was drilled before 1910 and the oil is of inferior quality, having a Baume gravity ranging from 23° to 29°.

2. The second oil zone lies at a depth between 300 m. and 460 m. and is mostly encountered at Nagamine where it consists of several oil sands.

3. The third oil zone lies at a depth of 460 m. to 760 m. below the surface and consists of many oil sands. This zone extends almost over the entire field and is most productive in the north and south quarters of the field, while the central part of the field, Nagamine and Kamata, is characterized by a blowout of gas with less amount of oil. The oil is usually of high grade, more than 40° Baume.

4. The fourth oil zone lies deeper than 900 m. from the surface at Nagamine, where the deepest well reached about 1,090 m. and struck several productive oil sands accompanied by much gas. In the north and south quarters of the field these oil sands lie at depths of 1,220 to 1,280 m. below the surface. The produced oil has a gravity of 46° Baume.

The Takamachi Field lies on an alluvial plain and sand dune, lying 6 kilometers northeast of the town of Kashiwazaki, and embraces an area of about 4 kilometers in length and 300-700 m. in width. The strata lying under the alluvial deposit consist of sandy shale, an alternation of sandstone and shale of the Shiiya series and the black shale of the Kubiki series. The strata seem to form a gentle anticline with oil sands existing in the Shiiya and Kubiki series. The field was opened in 1924 and during the first three years a large amount of gas was obtained with a small quantity of oil at depths of from 800 m. to 1,000 m. from the surface. In 1927, a rotary well, at Warimachi, in the northern part of the field, reached 830 m. from which was obtained much gas, about 200,000 c.m. But, owing to the gradual decrease of the production, a deeper boring was tried, and a very productive oil zone was discovered at a depth of 1,132-42 m. in January, 1928. The well produced daily 120 koku of oil. After this, another gusher, No. 8 Takamachi, was completed, which produced daily about 300 koku at a depth of 1,400 m. Since that time the field has been actively developed and now there are 22 productive wells.

The production of all Nishiyama oil fields in the last five years was as follows:

Year—	Koku	No. of oil wells
1924	159,240	447
1925	244,179	442
1926	275,141	450
1927	249,324	437
1928	221,465	450

Kubiki Field

The Kubiki Field embraces the oil districts scattered along the Iida River, and is situated about 12 kilometers southeast of the city of Takada. The strata composing the field consist chiefly of black shale of the Kubiki series. Thick tuff beds locally known as "Shiro" are interbedded in the shale, and form the important oil-bearing beds in this field. At the Iwagami district, which was once an active center of the oil industry, there is a gentle dome-like structure; but further southward, the strata are, so far, monoclinal, with a dip of 20 degrees accompanying several faults and flexures, by which oil accumulation is greatly influenced. Here the depths of oil wells vary from 180 to 280 m. The oil from this deposit is of the best quality in Japan.

having a gravity of 40°-45° Baume and containing some paraffin.

Of the Niigata oil fields, there are many that are promising, but as yet not prospected. The most important are those of Kamo-machi, the eastern part of the Omo oil field, Ojiya-machi, the southeastern part of Kariha-gun and several places in Higashi and Naka-Kubiki-gun.

The production in the Niigata oil fields is as follows: 1923, 777,591 koku; 1924, 766,128 koku; 1925, 809,907 koku; 1926, 778,793 koku; and 1927, 758,384 koku.

Taiwan Fields

In Taiwan (Formosa), an oil belt runs from north to south for a distance of about 350 kilometers in the western part of the island. In this section of the country there are two important fields, namely Shikkoko and Kinsui, the latter being developed as a gas field since 1924.

The Shikkoko Field lies in a mountainous region about 12 kilometers southeast of the town of Byoritsu in the Prefecture of Shinchiku. It has been developed since 1904, but it was not until 1926 that it became productive. The strata form an anticline of about 27 kilometers in length, dipping 40 to 70 degrees in the east wing and 35 to 60 degrees in the west wing, while in the southern part of the productive area, they dip 20 degrees in the west wing. The strata consist of an alternation of calcareous sandstone and shale of the Arisan series. The proved area of the field is about 5.5 kilometers in length and 300 to 350 m. in width. In the depths between 223 m. and 955 m. have been found six oil sands, of which those lying deeper than 750 m. are very productive. Oil has a gravity of 29° Baume.

The production of the field during the last five years follows:

Year—	Koku	No. of oil wells
1924	19,835	13
1925	21,037	13
1926	80,333	16
1927	126,553	22
1928	99,954	29

The Kinsui gas field lies on a hilly region about 8 kilometers northeast of the town of Byoritsu. The strata consist of sandstone and sandy shale belonging to the Byroitsu series, and form an anticline running northeast-southwest for about 20 kilometers and dipping 10 to 40 degrees in both wings. The gas reservoirs containing some gasoline are found in a sandstone, belonging to the Arisan series and lie in depths of 500 to 850 m. from the surface. The produced gas is now transported by a pipe line to the Shikkodo Field and is burned there as fuel.

In Taiwan, there remain several districts to be developed in the future.

Besides the discovered oil fields, there are many promising fields in Hokkaido, Aomori, Akita, Yamagata, Niigata, Nagano, Shizuoka and Taiwan. Since 1927, 20 of them, being subsidized by the government, are being prospected by individuals and oil companies.

The fields under prospection follow:

Village, district, prefecture—
1. Horonobe, Teshio, Hokkaido.
2. Atsuma, Yufutsu, Hokkaido.
3. Niikappu, Niikappu, Hokkaido.
4. Shinjo, Higashi-tsugaru, Aomori.
5. Tokiwa, Yamamoto, Akita.
6. Hibiki, Yamamoto, Akita.
7. Oganaka, Minami-akita, Akita.
8. Shimokitade, Kawabe, Akita.
9. Michikawa, Yuri, Akita.
10. Okura, Mogami, Yamagata.
11. Shimojo, Minami-kambara, Niigata.
12. Omo, Minami-kambara, Niigata.
13. Shimagami, Nishi-kambara, Niigata.
14. Izumozaki, Santo, Niigata.
15. Yoita, Santo, Niigata.
16. Miyamoto, Santo, Niigata.
17. Kitajo, Kariha, Niigata.
18. Takeishi, Kariha, Niigata.
19. Takayanagi, Kariha, Niigata.
20. Nanaki, Kita-azumi, Nagano.

Production and Imports

According to statistics furnished by the Department of Industry and Commerce, the production and importation of crude oil of Japan during the last five years was as follows:

PRODUCTION

Year—	Koku	Yen*
1923	1,576,353	18,042,592
1924	1,580,435	19,455,114
1925	1,637,453	16,835,930
1926	1,496,477	14,971,914
1927	1,449,883	12,466,489

IMPORTATION

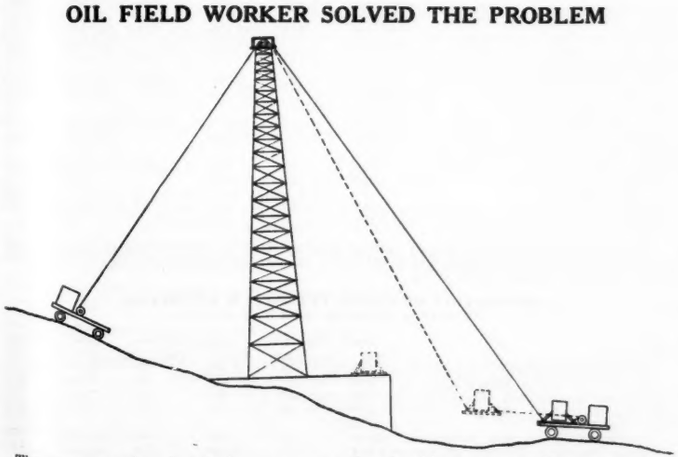
Year—	Koku	Yen
1923	990,782	9,269,527
1924	1,637,595	13,047,074
1925	2,165,980	15,701,724
1926	2,475,808	19,235,074
1927	3,415,781	23,992,334

*Yen is approximately 50 cents.

INTERNATIONAL'S INCREASE

CHATHAM, Ontario, Aug. 9.—During the first five months of 1930, International Petroleum Co. of Toronto, operating in South America, showed not merely increased production but also increased shipments of crude. The latter reached 10,002,360 bbls. for the five months compared with 9,385,483 bbls. last year, a gain of 6.4 per cent. The increase applied to both the Colombian and Peruvian fields. Colombian shipments were 7,774,055 bbls., compared with 7,346,658 bbls. in the five months of 1929, an increase of 5.6 per cent. From the Peruvian fields shipments were 2,228,305 bbls., as against 2,038,835, a gain of 14.2 per cent.

OIL FIELD WORKER SOLVED THE PROBLEM



The accompanying sketch shows a case of ingenuity in handling material in the oil fields. A General Electric drilling control unit was being trucked to the derrick, which was situated on a slope. The ground was loose and the truck could not get through.

The drilling contractor's trucks are equipped with winches operated by the truck drive. One truck, stationed farther up the slope and on the other side of the derrick, ran a cable up over the crown block sheave and down to the second, stalled truck, where it was fastened to the control equipment. A second cable, from the winch on the second truck, was connected to the other side of the control. The machinery was then slung through the air and landed on the derrick platform in a few minutes. Men with timbers steadied the unit in its transit to the platform.

JERGUSON

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have been used for steam boilers for 25 years and are now being used by leading oil companies for indicating oil levels in tanks, towers, stills, etc.

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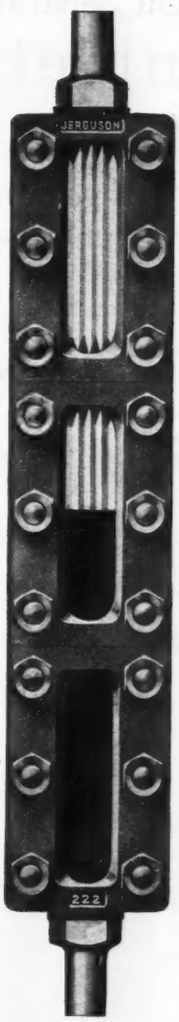

The *oil* shows BLACK

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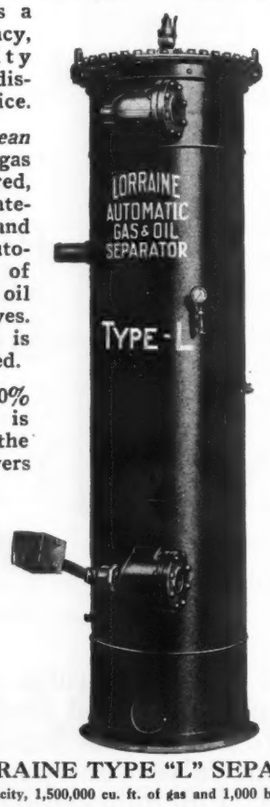

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BUREAU OF MINES REPORT FOR JUNE

SUPPLY AND DEMAND OF ALL OILS

(Including wax, coke and asphalt in thousands of barrels of 42 U. S. gallons)

	June, 1930	May,* 1930	June, 1929	Jan.– June, 1930	Jan.– June, 1929
NEW SUPPLY:					
Domestic production:					
Crude petroleum	76,513	80,176	83,403	465,128	488,115
Daily average	2,550	2,586	2,780	2,570	2,697
Natural gasoline	4,269	4,521	4,250	26,452	24,900
Benzol	235	254	257	1,473	1,526
Total production	81,017	84,951	87,910	493,053	514,541
Daily average	2,701	2,740	2,930	2,724	2,843
Imports:					
Crude petroleum	5,767	4,984	6,591	31,130	43,852
Refined products	4,027	3,603	2,426	21,587	11,073
Total new supply, all oils	90,811	93,538	96,927	545,770	569,466
Daily average	3,027	3,017	3,231	3,015	3,146
Increase in stocks, all oils	†3,384	1,674	5,519	8,472	46,536
DEMAND:					
Total demand	94,195	91,864	91,408	537,298	522,930
Daily average	3,140	2,963	3,047	2,968	2,889
Exports:					
Crude petroleum	2,508	2,203	2,615	12,094	11,495
Refined products	14,257	9,410	12,383	70,648	65,689
Domestic demand	77,430	80,251	76,410	454,556	445,746
Daily average	2,581	2,589	2,547	2,511	2,462
Excess of daily average domestic production over domestic demand	120	151	383	213	380
STOCKS (end of month):					
Crude petroleum:					
East of California‡	377,822	378,919	379,089	377,822	379,089
California§	146,321	148,472	136,901	146,321	136,901
Total crude	524,143	527,391	515,990	524,143	515,990
Natural gasoline at plants	928	920	1,356	928	1,356
Refined products	165,845	165,989	143,653	165,845	143,653
Grand total stocks, all oils	690,916	694,300	660,999	690,916	660,999
Days' supply	220	234	217	233	229
Bunker oil (included above in domestic demand	4,041	4,657	4,644	25,297	25,807

*Revised. †Decrease. ‡Excludes producers' stocks. §Includes residual fuel oil and producers' stocks.

COMPARATIVE ANALYSES

(Thousands of barrels of 42 U. S. gallons)

	June, 1930 Total	June, 1930 Daily av.	May, 1930 Total	May, 1930 Daily av.	Jan.– June, 1930	Jan.– June, 1929
CRUDE PETROLEUM:						
Runs to stills:						
Domestic	75,494	2,517	78,029	2,517	447,581	440,569
Foreign	5,253	175	5,618	181	30,076	40,274
Total	80,747	2,692	83,647	2,698	477,657	480,843
Imports	5,767	192	4,984	161	31,130	43,852
Exports	2,508	84	2,203	71	12,094	11,495
GASOLINE:						
Production*	37,537	1,251	39,293	1,267	223,317	208,735
Imports	1,670	56	1,768	57	8,158	3,515
Exports	7,126	238	4,953	160	34,165	28,996
Stocks†	50,225	.....	54,046	.....	50,225	42,017
Domestic demand	35,902	1,197	36,497	1,177	190,217	174,329
KEROSENE:						
Production	4,026	134	4,317	139	26,417	27,914
Imports	61	2	6	.....	120	105
Exports	1,796	60	826	27	9,160	10,318
Stocks	8,352	.....	8,384	.....	8,352	8,348
Domestic demand	2,323	77	3,181	103	18,064	18,354
GAS OIL AND DISTILLATE FUELS:						
Production	6,953	232	7,276	235	39,560	.....
Stocks	17,149	.....	15,721	.....	17,149	.....
RESIDUAL FUEL OILS:						
Production	24,139	805	26,685	861	154,238	.....
Stocks‡	21,153	.....	20,943	.....	21,153	.....
GAS OIL AND FUEL OIL:						
Production	31,092	1,036	33,961	1,096	193,798	222,066
Imports	2,287	76	1,810	58	13,097	7,368
Exports	3,950	132	2,402	77	19,824	18,461
Stocks	38,302	.....	36,664	.....	38,302	37,332
LUBRICANTS:						
Production	2,920	97	3,185	103	18,025	17,223
Imports	2	.....	2	.....	13	20
Exports	986	33	864	28	5,348	5,651
Stocks	9,742	.....	9,578	.....	9,742	7,869
Domestic demand	1,772	59	2,394	77	11,217	12,063
WAX (thousands of pounds):						
Production	43,680	1,456	45,920	1,481	308,280	329,757
Imports	1,522	51	3,726	120	15,979	17,175
Exports	23,015	767	21,405	690	135,649	141,863
Stocks	249,748	.....	248,524	.....	249,748	188,764
Domestic demand	20,963	699	21,570	696	130,271	126,649
COKE (short tons):						
Production	163,000	5,433	170,400	5,497	929,700	820,400
Stocks	890,700	.....	§866,100	.....	890,700	498,400
ASPHALT (short tons):						
Production	336,900	11,230	336,500	10,855	1,528,900	1,548,700
Stocks	312,000	.....	316,800	.....	312,000	247,100
ROAD OIL:						
Production	735	25	377	12	2,380	4,887
Stocks	540	.....	398	.....	540	
MISCELLANEOUS:						750
Production	911	30	535	17	3,194	
Stocks	480	.....	525	.....	480	

*Includes benzol production and natural gasoline used elsewhere than at refineries east of California. †Includes motor fuel blends held at natural gasoline plants. ‡East of California. §Revised—Texas Gulf Coast.

PRODUCTION OF CRUDE PETROLEUM BY FIELDS

(Thousands of barrels of 42 U. S. gallons)

FIELD:	June, 1930 Total	June, 1930 Daily av.	May, 1930 Total	May, 1930 Daily av.	Jan.- June, 1930	Jan.- June, 1929
Appalachian:						
Pennsylvania grade	2,139	71	2,448	79	13,605	11,255
Other (including Kentucky)	810	27	858	28	4,981	4,572
Lima, N. E. Indiana, Michigan	407	13	484	15	2,791	2,047
Illinois, Southwest Indiana	591	20	624	20	3,541	3,547
Mid-Continent:						
North Louisiana and Arkansas	2,890	96	2,839	92	17,301	19,569
West Texas, S. E. New Mexico	9,689	323	10,140	328	60,753	68,572
Other (Oklahoma, Kansas, North Texas, etc.)	34,200	1,140	35,714	1,152	197,238	198,327
Gulf Coast:						
Grade A	2,636	88	2,728	88	16,383	11,049
Grade B	3,260	109	3,276	105	18,518	14,367
Rocky Mountain	1,870	62	2,021	65	11,614	12,325
California	18,021	601	19,044	614	118,403	141,985
Total	76,513	2,550	80,176	2,586	465,128	488,115
CLASSIFICATION BY GRAVITY (approximately):						
Light crude	67,950	2,265	71,460	2,305	411,298	439,466
Heavy crude	8,563	285	8,716	281	53,830	48,649

(Continued on Next Page)

PRODUCTION OF CRUDE PETROLEUM BY STATES WITH CLASSIFICATION BY GRAVITY

(Thousands of barrels of 42 U. S. gallons)

	June, 1930 Total	June, 1930 Daily av.	May, 1930 Total	May, 1930 Daily av.	Jan.–June, 1930	Jan.–June, 1929
Arkansas	1,673	56	1,673	54	10,100	13,317
California:						
Long Beach	2,792	93	2,949	95	18,406	32,819
Santa Fe Springs	3,391	113	3,720	120	25,923	32,839
Rest of State	11,838	395	12,375	399	74,074	76,327
Total California	18,021	601	19,044	614	118,403	141,985
Colorado	131	4	137	4	825	1,227
Illinois	506	17	537	17	3,051	3,082
Indiana:						
Southwestern	85	3	87	3	490	465
Northeastern	5	.....	6	.....	27	33
Total Indiana	90	3	93	3	517	498
Kansas	4,064	135	3,969	128	21,246	19,814
Kentucky	607	20	657	21	3,785	3,420
Louisiana:						
Gulf Coast	675	23	628	20	3,586	3,550
Rest of State	1,217	40	1,166	38	7,201	6,252
Total Louisiana	1,892	63	1,794	58	10,787	9,802
Michigan	282	9	356	11	2,078	1,301
Montana	265	9	269	9	1,479	1,657
New Mexico	733	25	588	19	2,636	494
New York	327	11	393	13	2,109	1,610
Ohio:						
Central and eastern	454	15	464	15	2,697	2,560
Northwestern	120	4	123	4	687	713
Total Ohio	574	19	587	19	3,384	3,273
Oklahoma:						
Osage County	1,058	35	1,138	37	6,484	7,723
Oklahoma City	3,148	105	3,582	115	16,954	770
Seminole	7,232	241	7,433	240	46,023	73,302
Rest of State	7,944	265	8,806	284	47,140	45,309
Total Oklahoma	19,382	646	20,959	676	116,601	127,104
Pennsylvania	1,109	37	1,312	42	7,225	5,483
Tennessee	1	.....	1	.....	6	11
Texas:						
Gulf Coast	5,221	174	5,376	173	31,315	22,366
West Texas	9,009	300	9,595	310	58,406	68,294
Rest of State	10,754	359	10,786	348	59,391	51,409
Total Texas	24,984	833	25,757	831	149,112	142,069
West Virginia	451	15	478	16	2,763	2,743
Wyoming:						
Salt Creek	873	29	914	30	5,380	5,562
Rest of State	548	18	658	21	3,641	3,663
Total Wyoming	1,421	47	1,572	51	9,021	9,225
Total United States	76,513	2,550	80,176	2,586	465,128	488,115

STOCKS OF CRUDE PETROLEUM

(Thousands of barrels of 42 U. S. gallons)

	June 30, 1930	May 31, 1930	June 30 1929
EAST OF CALIFORNIA:			
At refineries by location:			
East Coast: Domestic	9,599	9,370	8,202
Foreign*	4,349	4,650	5,442
Appalachian	3,078	3,079	2,591
Indiana, Illinois, Kentucky, Michigan, etc.	3,181	3,185	2,945
Oklahoma, Kansas and Missouri	5,653	5,760	6,216
Texas: Inland	4,835	2,428	2,578
Gulf Coast: Domestic	7,256	10,846	9,802
Foreign*	221	264	687
Arkansas and inland Louisiana	1,059	993	1,402
Louisiana Gulf Coast: Domestic	5,012	4,252	3,975
Foreign	895	836	1,649
Rocky Mountain	1,634	1,827	2,028
Total	46,772	47,490	47,517
At refineries by origin:			
Pennsylvania grade	2,881	2,913	(†)
Other Appalachian (inc. Kentucky)	809	898	(†)
Lima-N.E. Indiana-Michigan	100	219	(†)
Illinois-S.W. Indiana	131	128	(†)
N. Louisiana and Arkansas	4,765	4,602	(†)
West Texas and S.E. New Mexico	4,854	4,732	(†)
Oklahoma, Kansas, N. Texas, etc.	18,615	17,988	(†)
Gulf Coast: Grade A	4,314	4,657	(†)
Grade B	3,181	3,742	(†)
Rocky Mountain	1,631	1,825	2,023
California	26	36	(†)
Foreign*	5,465	5,750	7,778
Total	46,772	47,490	47,517
Elsewhere than at refineries by origin:			
Pennsylvania grade	5,938	5,669	5,430
Other Appalachian (inc. Kentucky)	1,036	1,066	
Lima-N.E. Indiana-Michigan	1,085	995	770
Illinois-S.W. Indiana	10,124	10,159	10,868
N. Louisiana and Arkansas	21,728	21,232	23,148
West Texas and S.E. New Mexico	48,786	49,781	246,470
Oklahoma, Kansas, N. Texas, etc.	198,860	198,755	
Gulf Coast: Grade A	7,756	7,856	20,643
Grade B	11,480	11,495	
Rocky Mountain	24,257	24,421	24,243
Total	331,050	331,429	331,572
Total east of California	377,822	378,919	379,089
CLASSIFICATION BY GRAVITY (approx.):			
East of California: Light	338,176	340,207	333,102
Heavy	39,646	38,712	45,987
California: Light	41,045	42,912	33,169
Heavy (including fuel)	105,276	105,560	103,732
PRODUCERS' STOCKS (Not included above; approx.):			
East of California	6,400	6,100	6,700

*Includes importers' stocks. †Not available.

PRODUCTION AND DISTRIBUTION OF NATURAL GASOLINE

(Thousands of barrels of 42 U. S. gallons)

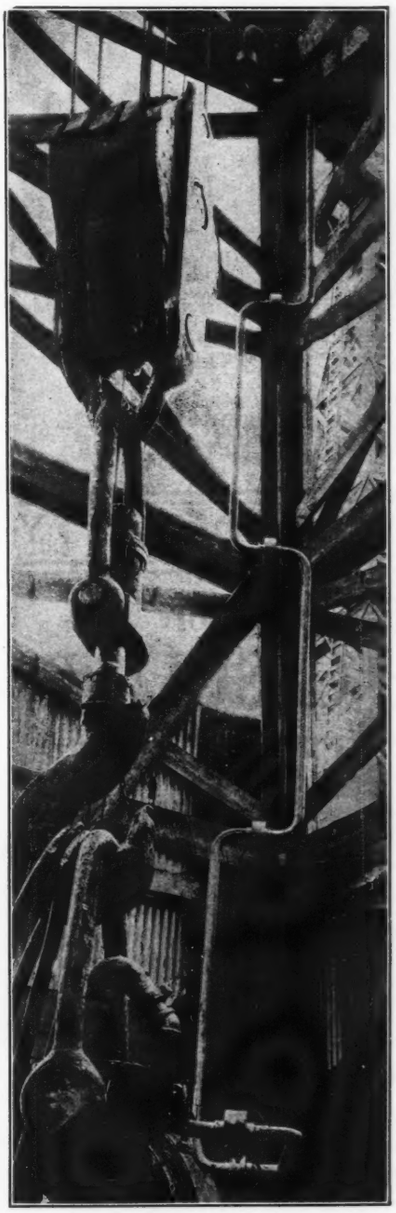
	June, 1930 Total	June, 1930 Dly. av.	May, 1930* Total	May, 1930* Dly. av.	Jan.-June, 1930 Total	Jan.-June, 1930 Dly. av.
Production	4,269	142	4,521	146	26,452	146
Decrease in all stocks	125	4	....	...	.....	...
Total	4,394	146	4,521	146	26,452	146
Blended at refineries	3,768	125	3,480	112	21,344	118
Run through pipe lines in California	111	4	205	7	1,142	6
†Blended at plants	23	1	21	1	145	1
†Sold direct to jobbers	200	6	200	6	1,300	7
Increase in all stocks	....	...	391	13	923	5
Balance	292	10	224	7	1,598	9
Total	4,394	146	4,521	146	26,452	146

*Revised. †East of California.

(Continued on Next Page)

MacClatchie's

new hose *is guaranteed to out-perform any other metal hose and to save you money* » » » » » » » » » »



FULLY confident that the new all-steel rotary hose is going to take its place beside the famous MacClatchie valve as standard equipment throughout the world, we offer the above guarantee. You may order this hose on trial today . . . test it in day-in-and-day-out service in the field . . . and if you are not entirely satisfied, we'll take it back.

Such guarantees are given only after a manufacturer is absolutely sure of his product. Months of field testing have proven that the MacClatchie All-Steel Rotary Hose has maximum flexibility under the highest pressures. Simple in design and sturdy, with an unobstructed fluid course and no sharp bends, it will never disappoint you, no matter under what circumstances you use it.

We know these things and we want you to order a hose on trial so that you may prove them to yourself.

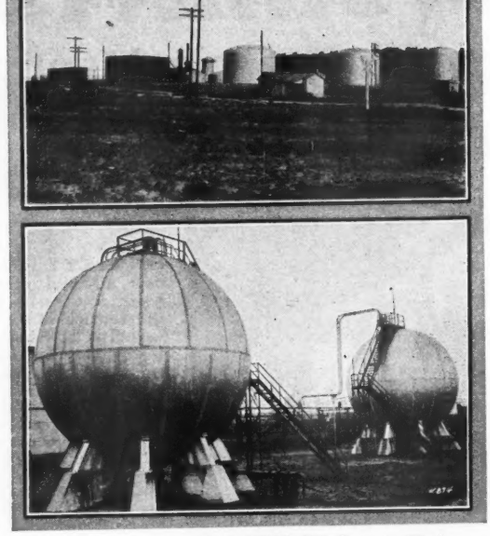
The price brings it within the reach of even the smallest operator . . . the simplicity of the design makes it possible to establish such a price. It is made in 2½" or 3" sizes. The five-length assembly . . . 37½' long . . . is standard, but any other assembly can be furnished. The picture on the left shows the hose in the drilling position.

A folder, describing the new hose in detail, will be sent to you on request. Order a hose on trial today. MacClatchie Manufacturing Co., Compton, Calif., U.S.A.

Maximum flexibility under highest pressures . . . unobstructed flow with no sharp bends . . . leak-proof . . . and the price brings it within reach of even the smallest operator!

"There are more MacClatchie Mud Pump Valves sold than any other make." Quality is responsible! Stocked by all Mid-Continent Continental Supply stores.

PITTSBURGH DES MOINES



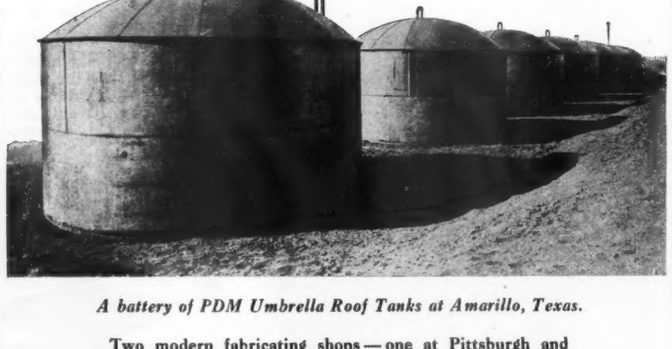
Upper View—Standard PDM Oil Storage Tanks built for the Col-Tex Refining Company, Colorado, Texas.

Lower View—PDM Spherical Gasoline Storage Tanks at the Baytown, Texas, plant of The Humble Oil and Refining Company. Capacity 2,500 barrels each.

TANKS OF PITTSBURGH-DES MOINES PDM TANKS PITTSBURGH QUALITY

for the storage of

OIL and GASOLINE



A battery of PDM Umbrella Roof Tanks at Amarillo, Texas.

Two modern fabricating shops—one at Pittsburgh and one at Des Moines — facilitate quick shipments from stock and attractive bids on PDM tanks of standard design. Pittsburgh-Des Moines engineers will gladly cooperate with you in recommending the best installation for your particular needs.

Pittsburgh-Des Moines Steel Co.

13 Neville Island, Pittsburgh · 1225 Praetorian Bldg., Dallas · 915 Tuttle St., Des Moines

New York San Francisco Seattle Chicago Atlanta

INDICATED DOMESTIC DEMAND FOR CRUDE PETROLEUM EAST OF CALIFORNIA

(Thousands of barrels of 42 U. S. gallons)

Domestic petroleum, fields of origin:	June, 1930		May, 1930		Jan.–June, 1930	Jan.–June, 1929
Appalachian:	Total	Daily av.	Total	Daily av.		
Pennsylvania grade	1,902	63	1,939	62	11,964	15,912
Other (including Kentucky)	929	31	818	26	4,929	
Lima, N. E. Indiana, Michigan	436	15	388	12	2,412	2,439
Illinois, Southwest Indiana	623	21	670	22	3,917	4,046
Mid-Continent:						
North Louisiana and Arkansas	2,231	74	2,973	96	17,539	22,824
West Texas, S. E. New Mexico	10,562	352	11,781	380	65,285	259,845
Other (Oklahoma, Kansas, North Texas, etc.)	33,468	1,116	34,582	1,116	195,714	
Gulf Coast:						
Grade A	3,079	103	2,963	96	17,471	23,546
Grade B	3,836	128	3,062	99	18,383	
Rocky Mountain	2,228	74	2,006	65	12,041	13,512
California	10	.....	.....	.....	19	.....
Total demand	59,304	1,977	61,182	1,974	349,674	342,123
Exports	1,758	59	1,449	47	7,490	7,529
Domestic demand	57,546	1,918	59,733	1,927	342,184	334,594
Foreign petroleum	6,052	202	5,890	190	31,750	43,897
Total domestic demand east of California	63,598	2,120	65,623	2,117	373,934	378,491

IMPORTS AND EXPORTS OF CRUDE PETROLEUM AND MAJOR REFINED PRODUCTS*

(Thousands of barrels of 42 U. S. gallons)

	June, 1930		May, 1930		Jan.–June, 1930	Jan.–June, 1929
CRUDE PETROLEUM:	Total	Daily av.	Total	Daily av.		
Imports	5,767	192	4,984	161	31,130	43,852
From Mexico	1,190	40	817	27	3,979	5,917
From Venezuela	3,322	111	2,724	88	18,668	29,862
From Colombia	1,144	38	1,002	32	7,164	6,362
From other countries	111	3	441	14	1,319	1,711
Exports:						
Domestic crude oil	2,508	84	2,203	71	12,094	11,495
To Canada	2,073	69	1,808	58	9,415	9,366
To other countries	434	15	395	13	2,678	2,122
Shipments	1	....	....	....	1	7
Foreign crude oil	....	....	....	....	....	....
REFINED PRODUCTS:						
Gasoline:						
Imports	1,670	56	1,768	57	8,158	3,511
Exports	7,126	238	4,953	160	34,165	28,994
To United Kingdom	2,469	82	1,386	45	10,459	8,402
To France	618	21	760	25	4,983	4,038
To Canada	493	16	419	13	1,816	2,196
To other countries	3,383	113	2,355	76	16,285	13,709
Shipments	163	6	33	1	622	650
Kerosene:						
Exports	1,796	60	826	27	9,160	10,318
To China	268	9	67	2	1,271	1,844
To United Kingdom	443	15	26	1	1,347	1,584
To other countries	1,071	36	723	24	6,375	6,757
Shipments	14	....	10	....	167	133
Gas oil and fuel oil:						
Imports	2,287	76	1,810	58	13,097	7,369
Exports	3,950	132	2,402	77	19,824	18,461
To Chile	390	13	335	11	2,353	3,231
To Panama	166	6	152	5	1,457	1,407
To other countries	2,946	98	1,652	53	13,827	12,207
Shipments	448	15	263	8	2,187	1,616
Lubricants:						
Exports	986	33	864	28	5,348	5,651
To United Kingdom	161	5	228	7	1,096	911
To France	174	6	112	4	779	815
To other countries	644	22	518	17	3,426	3,873
Shipments	7	....	6	....	47	52
Wax (thousands of lbs.):						
Imports	1,522	51	3,726	120	15,979	17,175
Exports	23,015	767	21,405	690	135,649	141,863
To United Kingdom	7,566	252	7,354	237	32,944	32,593
To Italy	2,403	80	2,403	78	18,851	12,989
To other countries	13,046	435	11,643	375	83,841	96,253
Shipments	...	....	5	....	13	28

*From Bureau of Foreign and Domestic Commerce.

STOCKS HELD BY REFINING COMPANIES, JUNE, 1930

(Thousands of barrels of 42 U. S. Gallons)

			Gas oil and fuel oil		
	Gasoline	Kerosene	Gas oil and distillate fuels	Residual fuel oils	Total
East Coast	7,814	1,664	3,574	4,743	8,317
Appalachian	1,803	366	717	418	1,135
Indiana, Illinois, Kentucky, etc.	8,249	738	1,440	2,614	4,054
Oklahoma, Kansas, Missouri	5,170	859	2,290	3,091	5,381
Texas	6,898	1,398	2,383	7,870	10,253
Louisiana and Arkansas	2,396	934	597	1,294	1,891
Rocky Mountain	2,823	267	170	1,123	1,293
California	15,059	2,127	5,978	.....	5,978
Total	50,212	8,352	17,149	21,153	38,302
Texas Gulf Coast	4,920	1,264	1,976	4,716	6,692
Louisiana Gulf Coast	1,989	891	418	605	1,023

	Wax (thousands of pounds)			Coke
	Lubricants	Crude scale	Refined	Total	(tons)
East Coast	3,289	68,376	23,110	91,486	36,200
Appalachian	1,364	22,668	4,083	26,751	6,900
Indiana, Illinois, Kentucky, etc.	781	16,375	2,877	19,252	104,000
Oklahoma, Kansas, Missouri	656	5,326	2,531	7,857	83,100
Texas	2,140	1,760	11,481	13,241	382,500
Louisiana and Arkansas	126	68,071	2,768	70,839	34,700
Rocky Mountain	159	18,514	1,808	20,322	119,200
California	1,227	.....	.....	.....	124,100
Total	9,742	201.090	48,658	249,748	890,700
Texas Gulf Coast	2,050	1,589	11,481	13,070	359,600
Louisiana Gulf Coast	118	68,071	2,768	70,839	34,600

		Other finished products			Unfinished oils		
	Asphalt (tons)	Road oil	Miscellaneous	Total	Natural gasoline	Other	Total
East Coast	125,200	59	38	96	83	8,677	8,760
Appalachian	3,500	5	85	90	10	1,564	1,574
Indiana, Illinois, Kentucky, etc.	63,800	144	177	321	38	5,426	5,464
Oklahoma, Kansas, Missouri	5,400	20	24	44	17	3,334	3,351
Texas	8,000	3	18	21	126	16,055	16,181
Louisiana and Arkansas	47,500	...	5	5	15	3,365	3,380
Rocky Mountain	4,800	105	13	118	2	1,811	1,813
California	53,800	205	120	325	1,993	*8,550	10,543
Total	312,000	540	480	1,020	2,284	48,782	51,066
Texas Gulf Coast	7,900	3	6	9	112	14,240	14,352
Louisiana Gulf Coast	39,100	...	5	5	2	2,598	2,600

*Includes 2,866,000 bbls. tops.

(Continued on Next Page)

SHIPMENTS FROM CALIFORNIA TO EASTERN PORTS IN THE UNITED STATES*
(Thousands of barrels of 42 U. S. gallons)

	June, 1930	May, 1930	Jan.-June, 1930	Jan.-June, 1929
Crude oil	....	....	....	661
Refined products	2,765	1,907	12,051	11,922
Gasoline	2,549	1,432	9,812	10,314
Kerosene	81	....	180	....
Gas oil	65	333	1,721	1,426
Diesel oil	64	....	208	22
Fuel oil	4	3	20	66
Lubricants	1	37	99	78
Asphalt	1	2	11	16

*Compiled by E. T. Knudsen of the San Francisco Office of the Bureau of Mines.

NUMBER OF WELLS COMPLETED ALL FIELDS*

	June, 1930	May, 1930	Jan.-June, 1930	Jan.-June, 1929
Oil	1,197	1,233	6,700	7,016
Gas	276	213	1,273	1,255
Dry	602	649	3,392	3,717
Total	2,075	2,095	11,365	11,988

*From The Oil and Gas Journal and California Office of American Petroleum Institute.

RECORD OF WELLS FOR VARIOUS IMPORTANT FLUSH FIELDS, JUNE, 1930*

	Completions: Oil	Gas	Dry	Total initial production (bbls.)	Average initial production (bbls.)	Drilling June 30
Seminole, St. Louis, etc.	66	11	2	75,000	1,100	119
West Texas	46	..	14	15,900	300	224
Long Beach	8	..	1	11,500	1,400	85
Santa Fe Springs	11	..	..	5,300	500	11

*From The Oil and Gas Journal and California Office of American Petroleum Institute.

RUNS TO STILLS AND OUTPUT OF REFINERIES, JUNE, 1930
(Thousands of barrels of 42 U. S. gallons)

	Crude oil: Domestic	Foreign	Total	Unfinished oils rerun	Natural gasoline	Total input
East Coast	9,719	4,946	14,665	943	134	15,742
Appalachian	2,688	.....	2,688	131	44	2,863
Indiana, Illinois, Kentucky, etc.	9,869	.....	9,869	323	209	10,401
Oklahoma, Kansas, Missouri	9,747	.....	9,747	312	375	10,434
Texas	18,546	70	18,616	463	1,019	20,098
Louisiana and Arkansas	4,894	237	5,131	509	317	5,957
Rocky Mountain	2,020	....	2,020	428	126	2,574
California	18,011	.....	18,011	161	*1,655	19,827
United States total	75,494	5,253	80,747	3,270	3,879	87,896
Texas Gulf Coast	13,193	70	13,263	403	792	14,458
Louisiana Gulf Coast	3,272	237	3,509	134	220	3,863

	Gas oil and fuel oils: Gasoline	Kerosene	Gas oil and distillate fuels	Residual fuel oils	Total	Lubricants	Wax (thousands of lbs.)†
East Coast	4,984	600	1,433	5,005	6,438	810	15,960
Appalachian	1,187	355	195	323	518	435	8,120
Indiana, Illinois, Kentucky, etc.	5,624	414	852	1,579	2,431	401	3,360
Oklahoma, Kansas, Missouri	5,555	735	281	1,897	2,178	271	3,640
Texas	8,326	896	1,451	5,511	6,962	636	4,200
Louisiana and Arkansas	2,337	411	659	1,249	1,908	62	7,280
Rocky Mountain	1,238	110	90	498	588	48	1,120
California	7,828	505	1,992	8,077	10,069	257	.....
United States total	37,079	4,026	6,953	24,139	31,092	2,920	43,680
Texas Gulf Coast	5,869	631	1,159	3,423	4,582	612	3,920
Louisiana Gulf Coast	1,712	336	460	737	1,197	48	7,280

	Coke† (tons)	Asphalt† (tons)	Other finished products: Road oil	Miscellaneous	Total	Unfinished products	Shortage
East Coast	12,900	162,500	115	45	160	1,123	610
Appalachian	2,900	4,400	7	28	35	128	137
Indiana, Illinois, Kentucky, etc.	49,600	58,400	191	333	524	302	119
Oklahoma, Kansas, Missouri	32,500	2,000	49	129	178	836	491
Texas	42,500	18,900	21	34	55	1,765	1,122
Louisiana and Arkansas	10,800	45,600	58	130	188	483	236
Rocky Mountain	11,600	200	98	45	143	350	33
California	200	44,900	196	167	363	‡123	434
United States total	163,000	336,900	735	911	1,646	5,110	3,182
Texas Gulf Coast	34,500	18,900	21	2	23	1,623	824
Louisiana Gulf Coast	10,800	36,000	....	123	123	68	100

*Includes 111,000 bbls. run through pipe lines. †Wax, coke and asphalt equivalent to 280.0 pounds per barrel and 5.1 and 5.5 bbls. per tons, respectively. ‡Includes 122,000 bbls. net tops produced.

GASOLINE PRODUCTION BY THE VARIOUS METHODS, JUNE, 1930
(Thousands of barrels of 42 U. S. gallons)

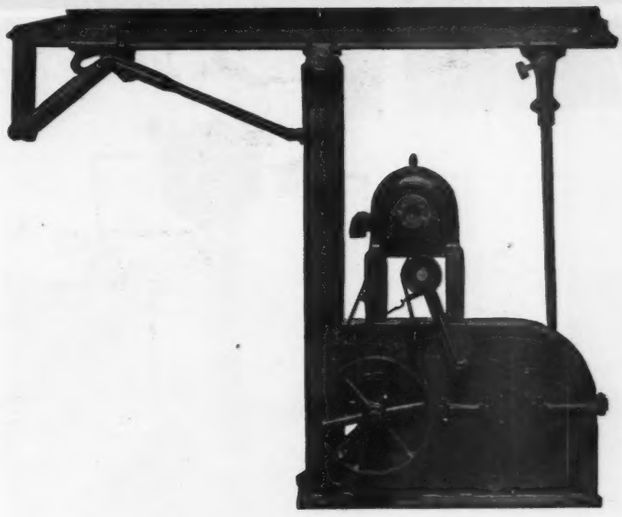
	Straightrun: Total	%	Cracked: Total	%	Natural gasoline: Total	%	Grand total
East Coast	2,451	49	2,399	48	134	3	4,984
Appalachian	752	63	391	33	44	4	1,187
Ind., Ill., Ky., etc.	2,880	51	2,535	45	209	4	5,624
Okla., Kans., Mo.	3,118	56	2,062	37	375	7	5,555
Texas	4,052	49	3,255	39	1,019	12	8,326
Louisiana and Arkansas	944	40	1,076	46	317	14	2,337
Rocky Mountain	552	45	560	45	126	10	1,238
California	4,776	61	1,397	18	*1,655	21	7,828
Total	19,525	53	13,675	37	3,879	10	37,079
Texas Gulf Coast	2,467	42	2,610	44	792	14	5,869
Louisiana Gulf Coast	724	42	768	45	220	13	1,712

*Includes 111,000 bbls. run through pipe lines.

PRODUCTION OF MOTOR FUEL
(Thousands of barrels of 42 U. S. gallons)

Gasoline produced at refineries:	June, 1930: Total	Dly. av.	May, 1930: Total	Dly. av.	Jan.-June, 1930	Jan.-June, 1929
Straightrun	19,525	651	20,591	664	117,802	120,077
Cracked	13,675	546	14,542	469	80,111	65,689
Natural gasoline:						
Blended at refineries	3,768	125	3,480	112	21,344	19,851
Run through pipe lines*	111	4	205	7	1,142	961
Total	37,079	1,236	38,818	1,252	220,399	206,578
Other natural gasoline:						
Blended at plants†	23	1	21	1	145	331
Sold direct to jobbers†	200	6	200	6	1,300	300
Benzol produced‡	235	8	254	8	1,473	1,526
Total motor fuel	37,537	1,251	39,293	1,267	223,317	208,735

*To refineries in California. †East of California. ‡Estimated with production of by-product coke as a basis.



Mechanically Correct Oil Well Pumping Powers

Fabricated with "H" Beam for Sampson Post and Walking Beam.

Toggle made from steel casting.

Interchangeable bronze bearings throughout.

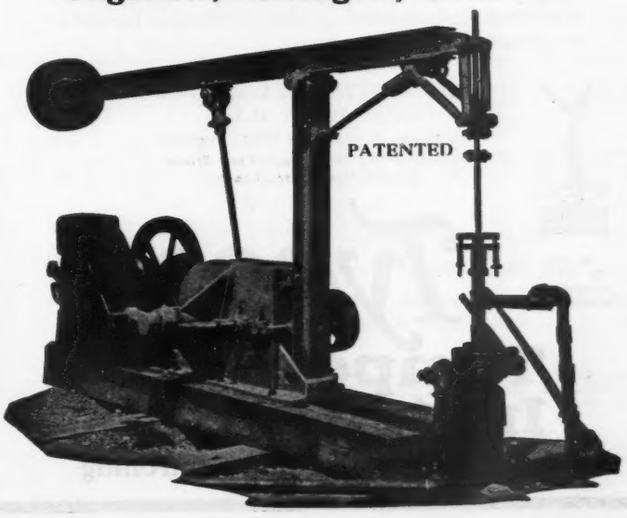
Cut gears running in oil.

Patented cam motion keeps polish rod in alignment at all times.

Can be used to pump from one to three wells.

Stork Engineering Company

Saginaw, Michigan, U. S. A.



Tycos Back Pressure Regulators maintain a constant back pressure in residue gas lines at a natural gasoline plant.

Tycos Back Pressure Regulators (Pilot Operated)

THE *Tycos* Back Pressure Regulator successfully meets the demand for an instrument capable of giving close and consistent back pressure regulation, which the present highly developed and scientific practices of natural gasoline manufacturers demand.

It will maintain constant back pressures on gasoline plant absorbers, accumulator tanks, fractionators or stabilizers, surge tanks, stock vent tanks, re-run stills, residue gas lines, etc. Also on pressure distillate receivers, or gas separators of refinery cracking units.

Close regulation is assured by the high sensitivity of the regulator response and the throttling action of the control valve. With tendency toward the slightest pressure change in the process under control, the valve in the gas discharge line immediately throttles to such a position as is necessary to release the required amount of gas to give a consistently smooth and constant back pressure, as is evidenced in the even line on the recording pressure gauge chart.

Additional information on this installation furnished on request.

Taylor Instrument Companies
ROCHESTER, N. Y., U. S. A.
Canadian Plant, Tycos Bldg., Toronto
Manufacturing Distributors in Great Britain
Short & Mason, Ltd., London

Booths 35 and 36 Scientific & Technical Bldg.

Tycos
Temperature Instruments
Indicating Recording Controlling

NEW LOCATIONS IN TEXAS PANHANDLE AND NORTH AND WEST TEXAS FIELDS

TEXAS PANHANDLE

Carson County

Empire Gas & Fuel Co.'s No. 26 S. B. Burnett, at the C NW, Section 76, Block 5, I.&G.N. Survey. North American Oil & Gas Co.'s No. 1 S. B. Burnett, at the C NW, Section 97, Block 4, I.&G. N. Survey. Texas Interstate Pipe Line Co.'s No. 1 A. F. Bennett, at the C SW, Section 6, Block 5, B.&B. Survey.

Gray County

Sullivan & Ochiltree's No. 1 J. S. Morse, 330 feet north and 150 feet east of the SW cor. N half SW, Section 16, Block A-9, H.&G.N. Survey. Cockrell-McIlroy Oil Co.'s No. 2 R. J. Sailor, 330 feet north and east of the SW cor. SW NE, Section 138, Block 3, I.&G.N. Survey. Cockrell-McIlroy Oil Co.'s No. 3 R. J. Sailor, 330 feet north and west of the SE cor. SW NE, Section 138, Block 3, I.&G.N. Survey. Cockrell-McIlroy Oil Co.'s No. 4 R. J. Sailor, 330 feet south and west of the NE cor. SW NE, Section 138, Block 3, I.&G.N. Survey. Magnolia Petroleum Co.'s No. 3 R. J. Sailor, 330 feet north and west of the SE cor. E half NE, Section 138, Block 3, I.&G. N. Survey. Mid-Continent Petroleum Corp.'s No. 3 M. L. Langham, 330 feet south and 910 feet east of the NW cor., Section 1, Block B-2, H.&G.N. Survey. Wilcox-Pampa Oil Co.'s No. 33 Worley & Reynolds, 330 feet north and 990 feet east of the SW cor. NE, Section 84, Block 3, I.&G.N. Survey.

Hutchinson County

Midwest Exploration Co.'s No. 1 C. R. Garner and others-C, C SE, Section 20, Block M-21, T.C.R.R. Survey. Gulf Production Co.'s No. 1 E. B. Johnson and others-A, 1,320 feet north and west of the SE cor., Section 1, Block Y-2, T. C.R.R. Survey.

Potter County

Canadian River Gas Co.'s No. 1 McBride estate-A, 4,950 feet north and 330 feet east of the SW cor., SE S half, Section 98, Block 46, H.&T.C. Survey.

Wheeler County

Murchison & Fain's No. 1 J. W. Grogan, C SE NW, Section 74, Block 23, H.&G.N. Survey. Murchison & Fain's No. 1 J. S. Hanes, C NW NW, Section 31, Block 17, H.&G.N. Survey. Murchison & Fain's No. 3 J. D. Purcell, C SE NW, Section 50, Block 17, H.&G.N. Survey. Upham Gas Co.'s No. 1 Williams & Laycock, C NW NW, Section 5, Block 27, H.&G.N. Survey.

NORTH CENTRAL AND WEST TEXAS

Week Ending July 30

Archer County

E. S. Bell's No. 1 J. H. Turbeville, 1,397 feet north and 450 feet east of the SW cor., Section 170, Robert Carson Survey. Shappell Oil Co.'s No. 1 Kemp & Kempner-F, 150 feet south and west of the NE cor. SE, Block 80, Kemp Wichita Valley Land. Dean & Alexander's No. 1 Charles S. Arnold, 150 feet north and 1,050 feet west of the southeast corner of the north 80 acres of the C. S. Arnold 400-acre tract out of the Joseph Levins Survey, A-259.

M. Keyes and others' No. 1 A. A. and R. L. Coffelt, 150 feet south and east of the northeast corner of the Mrs. A. M. Campbell 156.36-acre tract and located on A. A. and R. L. Coffelt's 213.44-acre tract out of the William Baker Survey, A-15. King & Hays' No. 1 J. J. Speer, 150 feet north and west of the SE cor., Section 13, W. L. Herring Survey, A-168. Steel Drilling and King Royalty Co.'s No. 1 R. N. Chancellor, 750 feet north and 450 feet west of the SE cor., Section 33, Club Ranch Subdivision.

Baylor County

Morrison & Elkhorn's No. 1 C. T. Porter, 4,200 feet north and 2,800 feet east of the most westerly southwest corner of the A. Barker Survey, A-22. R. Rogers' No. 1 William Warren estate, 150 feet south and west of the northeast corner of the C. Bell Survey, A-15.

Callahan County

Holden-Bradstreet and others' No. 1 S. G. Hobbs, 2,490 feet south and 2,611 feet west of the northeast corner of the S. C. Pitman Survey, No. 237. Meredith & Benton's No. 1 R. L. Berry, 150 feet north and west of the southeast corner of the west 40 acres of the south 80 acres of Section 70, Bayland Orphan Asylum Land. Star Drilling Co. and others' No. 1 E. L. Finley-A, 750 feet south and 150 feet east of the NW cor. NE NE, Section 77, Bayland Orphan Asylum Land.

Brown County

S. Herring and others' No. 2 C. L. Layman, 993 feet north and 150 feet west of the SE cor. SW, Section 41, H.T.&B. Survey.

Burnet County

J. P. Hobbs' No. 1 S. E. Guthrie, 160 feet south and 450 feet east of the northwest corner of the T.C.R.R. Survey, No. 83.

Coleman County

Hocker & Harris' No. 1 J. W. Harris, 1,445 feet north and 200 feet west of the southeast corner of the H. Starnes Survey, No. 63. Jamison-Pollard & Forster's No. 1 H. W. Kingsbury, 150 feet south and 1,550 feet east of the northeast corner of the U. Henderson 189.7-acre tract out of the Wharton County School Land Survey, No. 496, and located in the J. A. H. Cleveland Survey, No. 495.

Comanche County

F. Kirk and others' No. 1 F. Kirk, 780 feet south and 2,620 feet west of the northeast corner of the John Talbot Survey, No. 210.

Cooke County

A. V. Grant and others' No. 1 A. J. Dennis-B, 2,239 feet south and 397 feet west of the northeast corner of the H. Wilkerson Survey, A-1,173. Walker Petroleum Co.'s No. 1 Mrs. J. G. Jones, 195 feet south and 150 feet east of the northwest corner of the south 36.66 acres of the Mrs. J. G. Jones 76-acre tract out of the J. J. Arocha Survey, A-20.

Erath County

Texas Pacific Coal & Oil Co.'s No. 1 Texas Pacific Coal & Oil Co. (J. M. Diaz Survey), 300 feet south and 5,300 feet west of the SW cor., Section 23, Indianola Railroad Co. Survey, and located in the J. M. Diaz Survey.

Howard County

Greene Oil & Refining Co. and others' No. 1 L. C. Denman, 330 feet south and east of the NW cor. E half NE, Section 14, Block 30, Township 1s, T.&P. Survey.

Jack County

Buttram Petroleum Co.'s No. 11 J. A. Jones, 250 feet north and 700 feet east of the SW cor., Section 5, S.P.R. R. Survey, A-550.

Jones County

C. R. Pope and others' No. 1 W. D. Swann, 2,023 feet north and 490 feet west of the southeast corner of the I. Miley Survey, No. 281, A-268.

Lampasas County

Stewart Drilling Co.'s No. 1 F. Asher, 5,000 feet south and 7,000 feet east of the northwest corner of the J. R. Cook Survey. H. H. Thomas and others' No. 1 W. M. Aynesworth, 300 feet south and 750 feet east of the northwest corner of the D. N. McCrea Survey.

Pecos County

Phillips Petroleum Co.'s No. 2 Mrs. M. A. Smith, 330 feet north and west of the SE cor. N half, Section 24, Block 194, G.C.&S.F. Survey.

Reagan County

Big Lake Oil Co.'s No. 180 University Land, 920 feet north and 1,720 feet west of the SE cor., Section 2, Block 2, University Land.

Schleicher County

Westyde and Moody Oil Corp.'s No. 1 C. L. Meador, 1,320 feet north and west of the SE cor., Section 66, G.C.&S.F. Survey.

Taylor County

Sanger and others No. 1 City of Abilene, 830 feet north and 1,400 feet west of the SE cor., Section 66, Blind Asylum Land.

Palo Pinto County

Dudy Oil Corp.'s No. 1 R. S. Dalton, 300 feet northwest of the southeast line and 1,000 feet southwest of the north-

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Shackelford County

G. P. Mitchem and others' No. 2 J. H. Nail, 150 feet south and west of the NE cor. SW, Section 75, Block 10, E.T.R.R. Survey. Skelly Oil Co.'s No. 5 J. B. Matthews-S, 450 feet north and west of the SE cor. NW, Section 31, Block 10, E.T.R.R. Survey.

Throckmorton County

W. H. Landrum's No. 1 Reynolds Cattle Co., 150 feet north and east of the SW cor. N half, Section 81, Comanche Indian Reserve.

Ward County

S. Richardson and others' No. 4 G. W. O'Brien and others, 330 feet south and 2,340 feet east of the NW cor., Section 5, Block F, G.M.M.B&A. Survey.

Wichita County

R. R. Clark and others' No. 6 W. P. and J. F. Bickley, 450 feet south and 150 feet west of the NE cor., Section 2, C.&M. Survey, A-594. R. R. Clark and others' No. 1 J. J. Cabe, 450 feet north and 1,320 feet east of the SW cor., Section 270, Waggoner Colony Subdivision. Lambert & Trout's No. 5 W. W. Overbey, 200 feet south and 875 feet west of the most easterly northeast corner of the W. W. Overbey tract out of the J. M. Sharp Survey, A-262. Lambert & Trout's No. 6 W. W. Overbey, 900 feet north and 800 feet east of the northwest corner of the J. M. Sharp Survey, A-262, being 250 feet north and 1,515 feet west of the most easterly northeast corner of the W. W. Overbey tract. J. O'Neal's No. 1 W. B. Honaker, 2,670 feet south and 150 feet east of the NW cor., Section 1, C.&M. Survey, A-379. Panhandle Refining Co.'s No. 14 T. L. Burnett and others-A, 750 feet south and 150 feet west of the NE cor. SE, Section 6, S.A.&M.G. Survey, A-464. Steel Drilling and King Royalty Co.'s No. 1 Kemp & Kempner, 155 feet north and east of the SW cor. NW, Block 57, Kemp Wichita Valley Land. A. T. Wolfe's No. 5 Kemp & Kempner, 450 feet north and east of the southwest corner of Block 57, Kemp Wichita Valley Land. A. T. Wolfe's No. 6 Kemp & Kempner, 150 feet north and 300 feet west of the SE cor. SW, Block 57, Kemp Wichita Valley Land. A. T. Wolfe's No. 7 Kemp & Kempner, 150 feet north and 100 feet west of the SE cor. SW, Block 57, Kemp Wichita Valley Land. A. T. Wolfe's No. 8 Kemp & Kempner, 450 feet north and west of the SE cor. SW, Block 57, Kemp Wichita Valley Land.

Young County

Ard & Son's No. 1 G. W. Terrell estate, 150 feet north and east of the SW cor., Section 2,255, T.E.&L. Survey. B. Elmore's No. 1 O. Andrews, 150 feet south and east of the northwest corner of the O. Andrews tract out of Section 201, T.E.&L. Survey. Julian Oil and Stripling's No. 7 J. F. Larimore, 450 feet north and west of the SE cor. N half, Section 2,246, T.E.&L. Survey. L. C. Harrison and others' No. 1 A. W. Hardy, 150 feet south and west of the northeast corner of the west 60 acres of the NE, Section 251, T.E.&L. Survey. Julian Oil and Stripling's No. 8 J. F. Larimore, 1,350 feet north and 150 feet west of the SE cor. N half, Section 2,246, T.E.&L. Survey. Kliner & Riggs' No. 1 J. F. Larimore-A, 1,716 feet south and 450 feet west of the NE cor., Section 22, T.E.&L. Survey. Morris & Dunn's No. 1 B. H. Larimore, 1,166 feet north and 783 feet west of the SE cor., Section 2,244, T.E.&L. Survey. G. L. Pace's No. 1 J. O. Winkler, 1,816 feet north and west of the SE cor., Section 405, T.E.&L. Survey. Panhandle Refining Co. and others' No. 3 A. C. Watson, 1,000 feet north and 550 feet east of the SW cor. NE, Section 249, T.E.&L. Survey.

C. C. Williams' No. 1 C. F. Newman, 150 feet north and 600 feet east of the most westerly southwest corner of the C. F. Newman tract out of the S. Sallie Survey, A-252. L. A. Long and others' No. 2 R. M. Williams-A, 1,800 feet southeast of the northwest line and 800 feet southwest of the northeast line of

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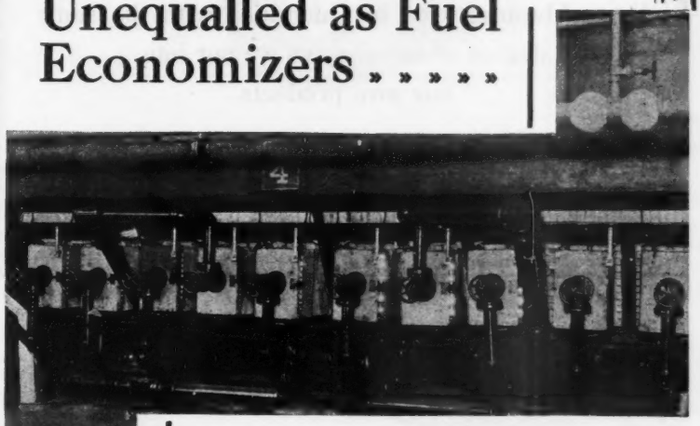

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the R. O. Woolfork Survey, No. 15, A-1,279.

Corrected Locations

Gray County: Magnolia Petroleum Co.'s No. 2 R. J. Sailor, 330 feet north and east of the southwest corner of the east 80 acres of the NE, Section 138, Block 3, I.&G.N. Survey.

Archer County: P. Trahan and others' No. 1 E. J. Netherton, 200 feet north and east of the southwest corner of the Thomas B. Bell Survey, No. 111, A-31.

Young County: L. A. Long and others' No. 1 R. M. Williams-A, 500 feet southwest of the northeast line and 1,600 feet southeast of the northwest line of the R. O. Woolfork Survey; A-1,279.

Shackelford County: Skelly Oil Co. and others' No. 1 J. B. Matthews, 150 feet north and west of the SE cor. NW, Section 31, Block 10, E.T.R.R. Survey.

Eastland County: McLester Oil Co. and others' No. 1 H. Exall, 2,550 feet north and 730 feet west of the SE cor. NE, Section 55, Block 4, H.&T.C. Survey.

GAS LIFT AIDS OUTPUT IN VENEZUELA OIL POOL

NEW YORK, Aug. 9.—Installation of gas lift in the El Mene Field of Venezuela has materially enlarged output of British Controlled Oilfields' properties, according to a report of the board.

"The present producing area at El Mene," says the report, "continues to maintain a steady output in accordance with the estimates made when installing the gas lift and conservation plants. These plants have operated continuously since their installation with only one interruption, caused by serious floods, and steps have been taken to prevent a recurrence. The compressor plant has been extended, and by the use of some spare plant the increasing production of gas is utilized for additional gas lift and repressuring.

"Upwards of 50 per cent of the non-flowing wells are now operated by gas lift; the benefits derived from repressuring are appreciable, the gas pressures being conserved and the gas-oil ratio being maintained at a very low figure.

"While the basic monthly prices on which our production is delivered under contract have remained steady since the end of the last financial year, ultimate prices were seriously affected by the rise in freight rate for tanker Gulf/UK.

"It is, however, satisfactory to note that as from March of this year freight rates have declined and the gradual completion of the large fleet of tankers now under construction by the Shell group and other owners should in the near future restore freight rates to a more reasonable level, with corresponding benefits to this company in the way of increased returns on our deliveries."

LEGAL

NOTICE OF SALE OF OIL AND GAS LEASE.

DEPARTMENT OF THE INTERIOR
UNITED STATES LAND OFFICE
Washington, D. C., July 17, 1930.

Notice is given that the following described lands in two units in Pawnee County, Oklahoma, are offered for sale under section 17 of the leasing act of February 25, 1930 (41 Stat. 437), at the royalty rates for oil and gas and in accordance with the drilling requirements fixed in the standard lease form, copy of which may be procured from the Commissioner of the General Land Office:

Unit No. 1—
T. 20 N., R. 9 E., Sec. 35, lot 2 (13.40 acres).
Unit No. 2—
T. 20 N., R. 9 E., Sec. 35, lot 3 (12.05 acres).

Offers may be submitted on each unit and on the combined units, each unit to be considered separately as to drilling requirements and royalty rates.

The sale will be held at 10:00 a. m. on 10th day of September, 1930, at the office of the U. S. Geological Survey, 411 Wright Building, Tulsa, Oklahoma, and the successful bidder will be required to deposit on the date of sale one-fifth of the bonus bid by certified check on a solvent bank or cash.

The bidders are warned against violation of the provisions of section 59, U. S. Criminal Code, approved March 4, 1909, prohibiting any unlawful combination or intimidation of bidders.

The right is reserved to reject any and all bids in the discretion of the Secretary of the Interior.

(Signed) C. C. Moore,
Commissioner.

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The Oil and Gas Journal
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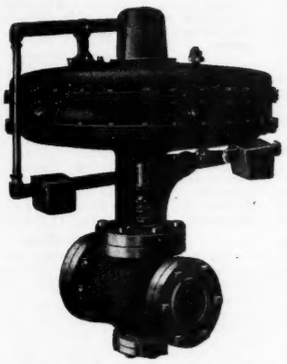

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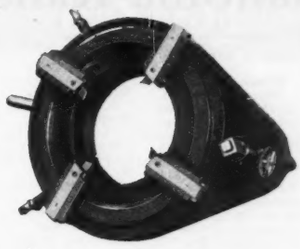

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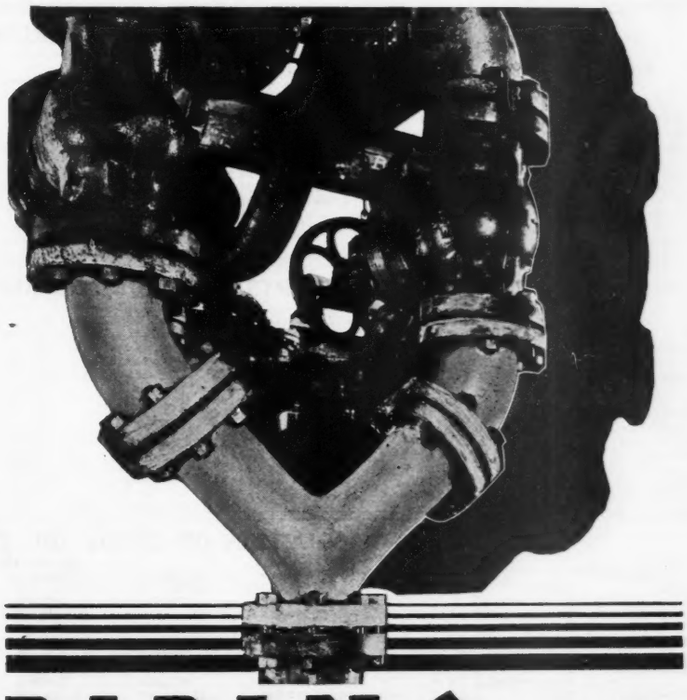

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